BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

In the Matter of)	
)	
Reexamination of Roaming Obligations)	
of Commercial Mobile Radio Service)	WT Docket No. 05-265
Providers)	
)	

To: The Commission

REPLY COMMENTS OF SOUTHERNLINC WIRELESS

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Dated: January 26, 2006

EXECUTIVE SUMMARY

As described in SouthernLINC Wireless' reply comments on roaming for commercial mobile radio services (CMRS), virtually every participant in this proceeding agrees that roaming is an integral and important component of the CMRS marketplace, and the availability of automatic roaming services significantly benefits U.S. consumers and a competitive CMRS market. In addition to these significant consumer and economic benefits, ubiquitous nationwide access to mobile wireless services through automatic roaming plays a vital role in public safety and national security, providing a form of interoperability and facilitating effective communication and coordination among government agencies and emergency recovery crews during times of emergency. However, the record of this proceeding clearly demonstrates that many carriers, particularly regional and rural carriers, are experiencing trouble in their efforts to obtain reasonable automatic roaming agreements for the benefit of their customers, and market forces alone have not proven sufficient to make automatic roaming available to consumers.

The primary reason underlying the failure of the market to make reasonable automatic roaming available is that carriers are only able to provide roaming to their customers if they in turn are able to receive wholesale roaming services from other carriers utilizing the same technology platform (e.g., CDMA, GSM, or iDEN). As discussed in these reply comments, and as explained in the economic reports by Dr. R. Preston McAfee, Professor of Business, Economics, and Management at the California Institute of Technology, there are significant structural differences between the market for retail CMRS services, which the Commission has described as highly competitive, and the market for wholesale roaming services, which is far less competitive. Dr. McAfee's analysis shows that the market for wholesale roaming services is more accurately described as one where monopolies and/or duopolies prevail, thus requiring greater scrutiny.

Because market forces have failed to make ubiquitous nationwide access to wireless services available to all U.S. consumers through automatic roaming, numerous carriers have joined SouthernLINC Wireless in calling for Commission action to ensure that all carriers make automatic roaming service available at reasonable rates and on reasonable and nondiscriminatory terms and conditions. This position is summarized in the following "CMRS Roaming Principles," which many carriers have endorsed as mirroring their own views on roaming:

- Carriers must provide in-bound automatic roaming (*i.e.*, permitting another carrier's customers to roam onto its network) to any requesting carrier with a technologically compatible air interface. All services that a carrier is currently offering (*e.g.*, voice, data, dispatch) must be offered to a requesting carrier with a technologically compatible air interface.
- Carriers must provide in-bound automatic roaming services under rates, terms and conditions that are just, reasonable and non-discriminatory. In this respect, the FCC clarifies that Sections 201 and 202 do apply to roaming services.
- Carriers must negotiate in good faith.
 - > FCC involvement is required only if a complaint is filed.
- The §208 complaint process should be strengthened to ensure it is an effective avenue for redress. To do so the FCC should incorporate the following presumptions:
 - A reasonable rate presumption. FCC should adopt the presumption that a just and reasonable wholesale rate for roaming cannot be higher than the carrier's best retail rate or average retail rate per minute.
 - A technical feasibility presumption. If a carrier is already providing roaming service (data, voice, dispatch) to other carriers using the same air interface then the roaming service will be presumed to be technically feasible (shifting the burden of proving it is not technically feasible)
 - A rapid response mechanism. Because of the competitive nature of the wireless industry, complaints cannot be allowed to languish indefinitely. Therefore, roaming complaints will be placed on the Enforcement Bureau's Accelerated Docket under Section 1.730 of the Commission's Rules.

As described in these reply comments, SouthernLINC Wireless' proposal achieves the goal of widespread access to automatic roaming service while also satisfying the concerns expressed by certain carriers regarding the impact that any automatic roaming rule might have.

SouthernLINC Wireless again urges the Commission to take immediate action to address the problems identified in this proceeding and to adopt SouthernLINC Wireless' proposals in order to ensure the development and availability of automatic roaming services and to ensure that all U.S. consumers will have equal access to ubiquitous mobile wireless services nationwide.

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To: The Commission

REPLY COMMENTS OF SOUTHERNLINC WIRELESS

Southern Communications Services, Inc. d/b/a SouthernLINC Wireless ("SouthernLINC Wireless") hereby submits its reply comments in the above-captioned proceeding regarding the roaming obligations of commercial mobile radio service (CMRS) providers.¹

As described herein, virtually every commenter in this proceeding agrees that roaming is an integral and important component of the CMRS marketplace and that the availability of automatic roaming services significantly benefits U.S. consumers and a competitive CMRS market. However, the record of this proceeding clearly demonstrates that many carriers, particularly regional and rural carriers, are experiencing difficulty in their efforts to obtain reasonable automatic roaming agreements for the benefit of their

Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, Notice of Proposed Rulemaking, FCC 05-160 (rel. August 31, 2005) ("NPRM").

customers and that market forces alone have not proven sufficient to make automatic roaming available to consumers.

The primary reason underlying the failure of the market to make reasonable automatic roaming available is that carriers are only able to provide roaming to their customers if they in turn are able to receive wholesale roaming services from other carriers utilizing the same air interface technology (e.g., CDMA, GSM, or iDEN). As discussed in these reply comments, and as explained in the attached report by Dr. R. Preston McAfee, Professor of Business, Economics, and Management at the California Institute of Technology² – contrary to the economic analysis presented by Sprint Nextel³ – there are significant structural differences between the market for retail CMRS services, which the Commission has described as highly competitive, and the market for wholesale roaming services, which is far less competitive. These differences require a separate market analysis, which Dr. McAfee has performed, in order to demonstrate the actual level and nature of competition in the market for wholesale roaming services and the need for Commission action.

Because market forces have failed to make ubiquitous nationwide access to wireless services available to all U.S. consumers through automatic roaming, numerous carriers have joined SouthernLINC Wireless in calling for Commission action to ensure that all carriers make automatic roaming service available at reasonable rates and on reasonable and nondiscriminatory terms and conditions. SouthernLINC Wireless'

² / Dr. R. Preston McAfee, "The Economics of Wholesale Roaming in CMRS Markets: Reply Comments," January 26, 2006 ("McAfee Analysis"). A copy of this report is provided as Attachment B to these reply comments.

³ / Comments of Sprint Nextel, Attachment, Gregory L. Rosston, "An Economic Analysis of How Competition Has Reduced High Roaming Charges," November 2005 ("Rosston Report").

proposal reflects and incorporates the "CMRS Roaming Principles," a basic set of principles regarding the provision and availability of automatic roaming services that is endorsed by a number of carriers as substantially mirroring their own views.⁴ These principles reflect SouthernLINC Wireless' initial comments and strike the appropriate balance between the public interest need for ubiquitous access to all mobile wireless services and the need to provide carriers with the flexibility and the appropriate competitive and commercial incentives to ensure ongoing competition and innovation in the CMRS market. As outlined in the "CMRS Roaming Principles" and explained in more detail below, SouthernLINC Wireless recommends the following approach:

- The Commission should adopt a rule requiring all CMRS carriers to provide automatic *inbound* roaming for all services to any requesting technologically compatible carrier at reasonable rates and on reasonable and nondiscriminatory terms and conditions and in a timely manner.
- The Commission should modify its Section 208 complaint process and adopt appropriate evidentiary presumptions regarding claims made under Sections 201 and 202 that reflect the public interest need for roaming and the goals of the automatic roaming obligations, as well as appropriate procedures to ensure that its actions and decisions under this process are sufficiently timely to meet the demands of the fast-moving wireless market.
- The Commission should adopt appropriate measures for enforcing the automatic roaming obligations, including, but not limited to, forfeitures and enforceable orders compelling carriers to enter into and conduct good faith roaming negotiations.

SouthernLINC Wireless' proposal achieves the goal of providing widespread access to mobile wireless services while also satisfying the concerns expressed by the nationwide carriers regarding the impact that any automatic roaming rule might have.

⁴ / A copy of the "CMRS Roaming Principles" is provided as Attachment A to these reply comments.

SouthernLINC Wireless again urges the Commission to take immediate action to address the problems identified in this proceeding and to adopt SouthernLINC Wireless' proposals in order to ensure the development and availability of automatic roaming services and to ensure that all U.S. consumers will have equal access to ubiquitous mobile wireless services nationwide.

I. ROAMING IS IMPORTANT TO CONSUMERS AND TO A COMPETITIVE MARKET

A. Carriers Overwhelmingly Agree on the Importance of Roaming for Consumers and a Competitive CMRS Market

The importance of roaming for consumers and a competitive CMRS market is clearly demonstrated by the comments submitted in this proceeding, in which virtually every commenter from the largest nationwide carriers to small rural providers agreed that roaming is "an integral part of the CMRS marketplace."⁵

SouthernLINC Wireless agrees with the majority of commenters that consumers increasingly expect and demand the ability to access and utilize mobile wireless services on a nationwide basis. Centennial Communications stated that consumers "have come to expect that wireless service will offer a 'seamless, nationwide network of networks' to which they will have automatic access." And according to T-Mobile, "the success of any wireless carrier is rooted in whether it can meet consumer demand for affordable wireless services wherever consumers require access." The availability of reasonable

⁵/ Comments of T-Mobile at i.

⁶ / See, e.g., Comments of Verizon Wireless at 2; Comments of T-Mobile at 2; Comments of Leap Wireless at 5; Comments of MetroPCS at 3; Comments of Centennial Communications at 2.

⁷/ Comments of Centennial Communications at 10 (internal citations omitted).

⁸/ Comments of T-Mobile at 2.

automatic roaming for all mobile wireless services is the only way to meet this demand for all U.S. consumers.

As Verizon Wireless pointed out, "no single CMRS carrier has ubiquitous service coverage in the United States." Regional and rural carriers require roaming in order to be able provide their customers with access to wireless services when they travel outside of their "home" region, while the nationwide carriers need roaming agreements to fill in coverage gaps. 10 Centennial Communications provided an excellent description in its comments of the way that the regional and nationwide carriers complement each other in the establishment of a "seamless, nationwide 'network of networks'," stating that the local focus of smaller regional carriers gives them "something meaningful to offer the larger carrier – good network coverage in areas where the large carrier might not find it economic to build out its own network – or at least not as fully – in light of the other substantial demands for capital facing the larger network." 11 Centennial Communications continued: "In return, a reasonable automatic roaming agreement with a nationwide carrier allows the smaller carrier to offer its own subscribers nationwide calling privileges, so that when the smaller carrier's customers travel – whether on business or for personal reasons - they can continue to use their wireless service in a seamless and efficient manner."12

The availability of automatic roaming is also necessary to ensure that all consumers will continue to have competitive service options even as the CMRS industry

⁹/ Comments of Verizon Wireless at 2.

¹⁰ / See, e.g., Comments of US Cellular at 7; Comments of Cingular at 11.

^{11 /} Comments of Centennial Communications at 10.

¹²/ Comments of Centennial Communications at 10.

continues to consolidate and the number of competitive service providers continues to decrease. As an example of the pace and impact of industry consolidation on consumer carrier choice, one need only look to the list assembled by the Commission of the nation's top twenty-five CMRS carriers as of December 31, 2004 (as measured by the number of subscribers), and compare that list to the market of 2006. In just twelve months, eight of the carriers on this list have been acquired by other carriers, and a ninth – Nextel Partners – has now applied for Commission approval of the transfer of control of its licenses in connection with its merger with Sprint Nextel. 15

The CMRS industry's significant advancements and improvements in pricing, quality, and service offerings have been driven by the existence of multiple and diverse CMRS carriers. Regional carriers have been the source of several innovative services and pricing plans in the industry and have brought competitive service options to millions of consumers who may have otherwise been without access to mobile wireless services. SouthernLINC Wireless agrees with Centennial Communications that, in this environment of industry consolidation, "consumers could find their choices of carriers

 $^{^{13}}$ / See, e.g., Comments of US Cellular at 4-8; Comments of Centennial Communications at 9.

Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, WT Docket No. 05-71, Tenth Report, FCC 05-173 (rel. Sept. 30, 2005) ("Tenth CMRS Market Competition Report"), Appendix A, Table 4.

Nextel Partners Application for Transfer of Control, ULS File No. 0002444650 (filed January 24, 2006) (this is the File Number of the lead application).

¹⁶ / See, e.g., Comments of SouthernLINC Wireless at 38; Comments of Leap Wireless at 4; Comments of MetroPCS at 2 − 3; Comments of NTCH at 1 − 2; See also McAfee Analysis at 13 − 14.

further limited – and the development of better services at more attractive prices repressed – if" regional carriers are denied reasonable automatic roaming arrangements.¹⁷

B. Automatic Roaming for All Wireless Services is Necessary to Address Important Public Interest Needs

SouthernLINC Wireless and other commenters agree that automatic roaming services must be available for all mobile wireless services – including voice, data, messaging, and "push-to-talk"/dispatch – in order to fulfill the important public interest needs of equal access to ubiquitous nationwide wireless services for all consumers, the establishment of a reliable nationwide communications infrastructure, and the promotion of public safety communications and interoperability.¹⁸

As the CMRS market continues to evolve, data, push-to-talk, and other advanced services and features are an increasingly important component of CMRS service and are being provided or introduced by many CMRS carriers. As SouthernLINC Wireless described in its initial comments, ubiquitous nationwide access for all consumers to these and all other mobile wireless services will confer significant economic and public interest benefits.¹⁹

Access to all mobile wireless services is also essential to the development of a reliable nationwide communications infrastructure and will facilitate interoperability for public safety, government agencies, utility recovery crews, and other essential public

^{17 /} Comments of Centennial Communications at 9.

¹⁸ / See, e.g., Comments of US Cellular; Comments of ACS Wireless; ACS Wireless Notice of Ex Parte Communication, WT Docket No. 05-265, filed Dec. 12, 2005 ("ACS Wireless Ex Parte Notice"); Comments of MetroPCS at 25.

SouthernLINC Wireless notes that the Commission holds the appropriate authority and jurisdiction over roaming for all wireless services, including, but not limited to, wireless voice and data services, pursuant to Title III of the Communications Act.

 $^{^{19}}$ / See Comments of SouthernLINC Wireless at 16 - 22 and 27 - 30.

service entities during times of emergency or disaster recovery. As an example of the need for access to all mobile wireless services, SouthernLINC Wireless received a letter from Mississippi Power, which uses SouthernLINC Wireless' services and systems for communications for their crews, describing the importance of and the need for dispatch roaming when operating outside of its service area.²⁰ A copy of this letter is provided as Attachment C to these reply comments.

C. The Record Demonstrates that Smaller Regional Carriers Are Experiencing Difficulty with Access, Prices, and Services

Large carrier commenters all believe that the market is working to make both wholesale and retail automatic roaming services available and assert that they are unaware of any evidence to the contrary. However, the comments submitted to the Commission in this proceeding provide ample evidence for the record of the difficulties smaller regional carriers are experiencing with respect to roaming prices, access, and services. This evidence demonstrates that market forces alone are not proving sufficient to make roaming reasonably available and that there are problems throughout the industry.

For example, Leap Wireless stated that large carriers charge it an average of \$0.28 per minute for roaming, with some rates in excess of \$0.40 per minute – rates that are three to four times higher than the FCC's estimated average gross revenue for all retail

²⁰ / Letter from Bobby J. Kerley, Vice President Customer Service and Retail Marketing, Mississippi Power, to Greg Clyburn, SouthernLINC Wireless, dated December 14, 2005.

 $^{^{21}}$ / See, e.g., Comments of Cingular at 10; Comments of Verizon Wireless at 17; Comments of Sprint Nextel at 12; Comments of T-Mobile at 6-8.

minutes of \$0.09 per minute.²² These figures stand in stark contrast to the estimated average rate of \$0.04 to \$0.08 per minute that MVNOs pay large carriers, as well as to the average roaming rate that small and rural carriers charge Leap of \$0.07 per minute.²³ Leap also stated that one carrier has forced it to accept a roaming arrangement in which Leap must pay *increasing* per-minute rates the more its customers use the host carrier's network, an approach that is the precise opposite of the volume discounts that are standard practice throughout the communications industry and in other, more competitive markets.²⁴ According to Leap, it had to accept these rates and arrangements in order to ensure that its customers would have adequate roaming coverage.²⁵

Another example is NTCH, Inc., a rural CDMA-based carrier, which stated that one of the two nationwide CDMA carriers charges NTCH a roaming rate of \$0.50 per minute plus an additional \$0.15 per minute for long distance, while the other nationwide carrier refused to discuss any roaming terms until after the instant proceeding was initiated. NTCH also described in its comments how it was forced out of the market in Grand Junction, Colorado, due to the refusal by larger carriers to provide it with reasonable roaming. In their joint comments, the Rural Telecommunications Group (RTG) and OPASTCO stated that their rural carrier members have reported roaming rates charged by the nationwide carriers ranging from \$0.35 to \$0.99 per minute and provided

²² / Comments of Leap Wireless at 14; *Tenth CMRS Market Competition Report* at 89, Appendix A, Table 8.

²³ / Comments of Leap Wireless at 14.

²⁴/ Comments of Leap Wireless at 13.

²⁵ / Comments of Leap Wireless at 13.

 $^{^{26}}$ / Comments of NTCH at 3-4.

Comments of NTCH at 4-5.

numerous specific examples of abuse of market power that some of their members have experienced from the large carriers.²⁸

As a final example, AIRPEAK and Airtel, small carriers utilizing the iDEN "Harmony" platform, submitted comments describing the refusal by Sprint Nextel and Nextel Partners to provide them with roaming services. This refusal is particularly striking given that Airtel only operates in Montana, a state where Sprint Nextel and Nextel Partners do not provide any iDEN services of their own. According to Airtel, the only arrangement it has been able to negotiate is a prepaid service that requires Airtel customers to replace their SIM cards for a Sprint Nextel SIM card — with a different phone number — when operating outside of Montana and swap back to their Airtel SIM cards while in Montana. Such an arrangement can hardly be considered "consumer-friendly."

These comments, together with the substantial evidence SouthernLINC Wireless has provided to the Commission in this and other proceedings, clearly demonstrate that market forces alone are not sufficient to ensure that all U.S. consumers have nationwide access to wireless services and that immediate Commission action on automatic roaming is necessary.

 $^{^{28}}$ / Joint Comments of RTG and OPASTCO at 10 - 13.

 $^{^{29}}$ / Joint Comments of AIRPEAK and Airtel at 7 - 8.

Joint Comments of AIRPEAK and Airtel at 7. The Subscriber Identity Module (SIM) card is a removable card with an embedded chip in iDEN and GSM handsets which contains all of the subscriber information necessary to make or receive a call (such as phone number, network authorization or verification codes, etc.), as well as personal information saved by the subscriber (e.g., personal phone directories and speed-dial settings). Forcing customers to replace their SIM card thus adds the further inconvenience of depriving them of access to their stored personal directories and other information.

II. WHOLESALE ROAMING SERVICES ARE A DISTINCT MARKET REOUIRING A SEPARATE MARKET ANALYSIS

The nationwide carriers argue that there is no need for Commission action on automatic roaming due to the competitiveness of the retail CMRS market. However, as explained in the attached report by Dr. R. Preston McAfee, Professor of Business, Economics, and Management at the California Institute of Technology, ³¹ this argument confuses retail competition with competition for wholesale roaming services. This confusion is largely due to the fact that these commenters have not performed a relevant market definition analysis that appropriately addresses the significant structural differences between retail and wholesale CMRS services, such as wholesale roaming. ³²

These commenters rely on market definitions developed by the Commission in the context of the Cingular/AT&T Wireless and Sprint/Nextel merger proceedings in support of their contention that there is sufficient competition to make automatic roaming widely available.³³ However, as pointed out by Dr. McAfee, the Commission's primary focus in these merger proceedings – and the sole focus of the Rosston Report – was on the overall level of competition in *retail* CMRS markets, and while the Commission did discuss the issue of roaming, it did not apply the same tests to wholesale roaming services themselves.³⁴ Because the Commission's previous analyses focused on retail services,

McAfee Analysis (Attachment B to these reply comments).

 $^{^{32}}$ / McAfee Analysis at 3 – 4.

 $^{^{33}}$ / See Comments of Cingular at 21 – 22; Comments of Verizon Wireless at 12 – 14; Comments of Sprint Nextel at 12 – 14 and Attachment (Rosston Report) at 10 – 14; Comments of T-Mobile at 16 – 17.

McAfee Analysis at 4. In its review of the Cingular/AT&T Wireless merger, the Commission did briefly comment on the possibility of a more concentrated market leading to abuses at the wholesale market level, however it found that there was insufficient evidence of that on the record. See Applications of AT&T Wireless Services,

additional market definition analysis is necessary in order to determine the level and nature of competition in the market for wholesale roaming services and the need for Commission action.³⁵ In the attached report, Dr. McAfee applies the framework of the Federal Trade Commission and Department of Justice's Horizontal Merger Guidelines to wholesale roaming to describe the existence of relevant technology-specific wholesale markets for voice and data roaming services.³⁶

As discussed in Dr. McAfee's analysis, and as the evidence discussed above illustrates, the markets for retail CMRS services and wholesale roaming services are structurally different and thus require a different market analysis than the Commission has previously employed. The existence of robust retail competition does not mean that wholesale roaming is also competitive. The Commission must therefore focus its analysis and considerations in this proceeding on the specific nature of wholesale roaming services and the impact the availability of such services has on U.S. consumers.

III. THE FCC SHOULD ADOPT AN AUTOMATIC ROAMING RULE, AND SOUTHERNLINC WIRELESS' PROPOSAL IS A FAIR, PROCONSUMER, AND EASY TO ADMINISTER APPROACH

Because market forces alone have failed to ensure the availability of automatic roaming, numerous carriers have joined SouthernLINC Wireless in calling for the adoption of a rule that would require carriers to make automatic roaming available at

Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, 19 FCC Rcd 21522, 21588-21592 (2004).

^{35 /} McAfee Analysis at 4.

 $^{^{36}}$ / See McAfee Analysis at 3-9.

reasonable rates and on reasonable and nondiscriminatory terms and conditions.³⁷ Given the problems that already exist in the market and the continuing consolidation of the CMRS industry, the adoption of such a rule is the only way to ensure the availability of and ubiquitous access to wireless services for all U.S. consumers.

At the same time, SouthernLINC Wireless believes that automatic roaming obligations should be imposed through the most efficient and least intrusive means possible, striking an appropriate balance between the public interest need for automatic roaming for all mobile wireless services and the need to provide carriers with sufficient flexibility to make business decisions in a competitive market. In its initial comments in this proceeding, SouthernLINC Wireless presented the Commission with a set of proposals that achieves this balance and addresses the concerns expressed by those commenters who opposed an automatic roaming rule.

A. "CMRS Roaming Principles"

Specifically, SouthernLINC Wireless recommends that the Commission adopt a rule that would require all CMRS carriers to make *inbound* automatic roaming available in a timely manner for all mobile wireless services to any requesting technologically compatible carrier at reasonable rates and on reasonable terms and conditions. Together with this rule, SouthernLINC Wireless recommends that the Commission streamline and strengthen the Section 208 complaint process by adopting certain straightforward

See, e.g., Comments of Leap Wireless; Comments of MetroPCS; Comments of ACS Wireless; Joint Comments of AIRPEAK and Airtel; Reply Comments of Unicom, Inc.; Comments of the National Telecommunications Cooperative Association (NTCA); Joint Comments of RTG and OPASTCO. See also Comments of US Cellular (urging the adoption of a policy statement that would require the provision of automatic roaming on reasonable terms and conditions); Comments of Centennial Communications (urging the Commission to declare that reasonable automatic roaming is required).

evidentiary presumptions that reflect the public interest need for roaming and the goals of the automatic roaming obligations. Finally, SouthernLINC Wireless recommends that the Commission adopt an underlying presumption that a just and reasonable wholesale rate for roaming is one that does not exceed the carrier's own lowest prevailing retail rates based on publicly available price information. This presumption, developed by Dr. McAfee, is both economically sound and efficient and effective to administer.

These proposals are reflected in the "CMRS Roaming Principles" which are attached hereto as Attachment A. A number of carriers have indicated that they agree with the approach reflected in the "CMRS Roaming Principles" and intend to voice their support in their reply comments. ³⁸

As discussed below, SouthernLINC Wireless submits that its overall proposal is a fair, rational, and economically sound approach that satisfies the concerns expressed by the nationwide carriers. It also will (i) promote and ensure consumer access to mobile wireless services; (ii) promote the ongoing development and deployment of new and innovative wireless services throughout the country; (iii) promote good faith commercial negotiation of roaming agreements between all carriers; (iv) foster increased competition; and (v) be easy to implement and administer, requiring minimal Commission involvement.

The attached "CMRS Roaming Principles" reflect a choice of standards to use as a "bright line" for determining a just and reasonable roaming rate: either a carrier's lowest prevailing retail rate or its average retail rate per minute. Either measure will function as a standard which is easily calculated from publicly available information. SouthernLINC Wireless, however, believes that the "lowest prevailing retail rate" approach is somewhat simpler to apply.

B. The Proposal Only Requires the Provision of "Inbound" Automatic Roaming Upon Request

As an initial matter, SouthernLINC Wireless emphasizes that its proposal would only require the provision of inbound automatic roaming upon request. In other words, if a technically compatible carrier wanted its customers to be able to roam on SouthernLINC Wireless' network, then SouthernLINC Wireless would be required to provide automatic roaming to that carrier's customers at reasonable rates and on reasonable and nondiscriminatory terms and conditions. However, SouthernLINC Wireless could not be compelled to send its own *outbound* roaming traffic to the other carrier's network.

In their comments, the nationwide carriers raised several concerns regarding the potential impact that an automatic roaming rule could have. However, many of these concerns are premised on their assumption that any rule must mandate both outbound and inbound automatic roaming, which could compel them to send roaming traffic to carriers not of their choosing, complicating traffic management and their ability to manage roaming costs.³⁹

For example, Cingular is concerned that an automatic roaming rule would "jeopardiz[e] the viability of single-rate plans," stating that if it "were required to enter into a reciprocal automatic roaming agreement with every GSM carrier, it would be virtually impossible to determine how often Cingular's subscribers would roam onto other networks, because they could roam onto any network, including one with very high

 $^{^{39}}$ / See Comments of Cingular at 23 – 25; Comments of Verizon Wireless at 5.

intercarrier roaming rates, even if a carrier with a lower negotiated rate were available."40 Cingular further argued that, in order to maintain service quality for its single-rate customers, it "must ensure that its roaming partners meet minimum quality standards." including the ability "to offer certain features and functionalities and to provide a minimum grade of service."41 According to Cingular, "[i]f it were forced into reciprocal automatic roaming arrangements, Cingular would be held responsible by the subscriber for the services provided by the non-conforming carrier."⁴² Cingular further contended that if reciprocal automatic roaming were to be required, carriers could simply demand automatic roaming rather than reduce their roaming rates or provide better service quality as an inducement for an automatic roaming agreement.⁴³

Verizon Wireless and T-Mobile expressed similar concerns, which were likewise based on an assumption that any automatic roaming rule must require both outbound and inbound roaming. Verizon Wireless stated that carriers direct their outbound roaming traffic onto the networks of carriers with whom they have the most favorable rates as a means of managing roaming costs. 44 It further argued that a roaming requirement would remove the incentive for small and rural carriers "to make the type of changes to their networks that attract the best roaming rates."45 T-Mobile also argued against any

^{40 /} Comments of Cingular at 24 - 25.

^{41 /} Comments of Cingular at 28 - 29.

^{42 /} Comments of Cingular at 29.

^{43 /} Comments of Cingular at 27.

^{44 /} Comments of Verizon Wireless at 5.

^{45 /} Comments of Verizon Wireless at 19.

reciprocal roaming requirement, asserting that this step would likely result in increased costs. 46

SouthernLINC Wireless' proposal renders these concerns moot, since outbound roaming would not be required and would remain a business decision for the carrier. While all carriers would hopefully always choose wherever possible to provide automatic roaming access rather than no automatic access for their customers' benefit, under SouthernLINC Wireless' proposal, carriers would still have full control and discretion regarding the networks on which their customers would be able to roam automatically. If a carrier feels that a potential roaming partner is unable to deliver a certain level of service quality, the carrier is under no obligation to send its roaming traffic to that potential partner. This approach allows carriers to protect themselves from service quality issues and also leaves room for pricing negotiations, addressing concerns that have been raised in this and other roaming proceedings. At the same time, carriers of all sizes will continue to have ample incentive to provide attractive roaming rates and services in order to attract roaming traffic from other carriers, and there will still be substantial flexibility for carriers to commercially negotiate mutually beneficial roaming arrangements.

C. This Proposal Requires Only Minimal FCC Involvement and Maintains the Emphasis on Commercially-Negotiated Agreements

Another significant aspect of SouthernLINC Wireless' proposal is that it requires only minimal involvement or oversight by the Commission. Commercially-negotiated agreements would continue to be the primary vehicle for carriers to obtain an automatic roaming agreement, with few restrictions other than that negotiations be conducted in

 $^{^{46}}$ / Comments of T-Mobile at 17 – 18.

good faith in a timely manner and that agreements be just, reasonable, and nondiscriminatory. There would be no need for the Commission to review, approve, or otherwise become involved in any way with either the negotiation process or the agreements themselves unless and until a complaint is filed.

Under SouthernLINC Wireless' proposal, the Commission would review complaints utilizing certain "bright-line" presumptions based on carriers' obligations to provide automatic inbound roaming for all mobile wireless services at reasonable rates and on reasonable and nondiscriminatory terms and conditions. Specifically:

- Carriers using the same or backwards-compatible air interfaces would be presumed to be technologically compatible, and technological compatibility would be further presumed where the respondent carrier has refused to enter into good faith negotiations regarding purported "technical issues":
- If a carrier is already providing a roaming service (e.g., voice, data, messaging, "push-to-talk") to other carriers using the same air interface, then provision of that roaming service to the requesting carrier will be presumed to be technically feasible; and
- Roaming rates that exceed the respondent carrier's lowest prevailing retail rates (based on publicly available information) would be presumptively unreasonable.⁴⁷

These presumptions – all of which are, of course, rebuttable – will expedite the complaint process in a way that significantly eases the burdens on all parties, including the Commission, by establishing clearly defined standards that are fair, straightforward, and which can easily be evaluated through publicly available information.

The method for determining a carrier's lowest prevailing retail rate is described in more detail in SouthernLINC Wireless' initial comments at 36 and in the accompanying McAfee Report at 18. An alternative approach suggested in the "CMRS Roaming Principles" is to use a carrier's average retail rate per minute, as proposed and described by Leap Wireless. *See* Comments of Leap Wireless at 19 – 21 and Attachment A, ERS Group, "Wholesale Pricing Methods of Nationwide Carriers Providing Commercial Mobile Radio Service: An Economic Analysis" ("ERS Report") at 17 – 19.

D. SouthernLINC Wireless' Proposal is a Rational, Economically Sound Approach

SouthernLINC Wireless' proposal is a rational and economically sound approach that allows for both the recovery of costs plus at least a competitive profit margin, and allows for robust retail competition.

As discussed above, the primary presumption underlying SouthernLINC Wireless' proposal is that the rates a carrier charges for wholesale roaming should not exceed that carrier's own lowest prevailing retail rate per minute. Evaluating this presumption requires little more than a simple analysis and comparison using publicly available information that is almost always available through a carrier's website. There is no need to develop or apply any cost formulas or to perform any cost structure analysis, nor would there generally be any need to obtain or utilize any confidential or proprietary information about a carrier's costs, business, operational structure, etc. 48

As Dr. McAfee explains in detail in his analysis of CMRS roaming, the use of a carrier's retail rates as a "bright line" test of the reasonableness of its wholesale roaming charges is also economically sound. A carrier's prevailing retail rates in a competitive market are rates that a carrier voluntarily offers to the public and which implicitly cover all the costs of providing retail service – including costs, such as customer acquisition, customer service, and customer support, that are not incurred when providing service to

⁴⁸ / SouthernLINC Wireless notes that this approach is vastly simpler and more straightforward than the cost-based TELRIC model used for wireline interconnection under Section 251.

See, e.g., McAfee Analysis at 10 – 14 and 18 – 19; Comments of SouthernLINC Wireless, Attachment B, Dr. R. Preston McAfee, "The Economics of Wholesale Roaming in CMRS Markets") ("McAfee Report") at 16 – 18; See also Comments of Leap Wireless, Attachment A (ERS Report) at 17 – 19.

roamers – as well as a reasonable profit for the carrier.⁵⁰ Therefore, a wholesale roaming rate that is no more than the carrier's retail rate per minute would be expected not only to cover the carrier's costs for providing roaming service, but also to even allow the carrier to earn a competitive profit margin from its roaming services.⁵¹ At the same time, carriers seeking roaming service would be protected against any unfair price squeeze by carriers with wholesale market power, since robust retail competition will ensure the reasonableness of a carrier's retail rates and, correspondingly, its wholesale roaming rates as well.⁵²

Furthermore, as explained by Dr. McAfee in his analysis, this approach ensures that, contrary to the comments filed by the nationwide carriers, all CMRS carriers will continue to have incentives to invest in network infrastructure and, in fact, may have even greater incentives to make such investments.⁵³ According to Dr. McAfee, a carrier would receive essentially the same rate of return from roaming customers as it would from its own best retail customers, and because this approach would make network use more efficient, the incentive to invest in infrastructure may be enhanced.⁵⁴

Finally, this approach provides carriers with both the flexibility and the incentive to enter into good faith commercial negotiations regarding automatic roaming and would

 $^{^{50}}$ / See, e.g., McAfee Analysis at 12, 19; Comments of SouthernLINC Wireless, Attachment B (McAfee Report) at 8-10; Comments of Leap Wireless, Attachment A (ERS Report) at 10-13.

See, e.g., McAfee Analysis at 12, 19; Comments of SouthernLINC Wireless, Attachment B (McAfee Report) at 16 – 18; Comments of Leap Wireless, Attachment A (ERS Report) at 18.

See Comments of SouthernLINC Wireless, Attachment B (McAfee Report) at 16 – 18; Comments of Leap Wireless, Attachment A (ERS Report) at 23 – 24.

⁵³ / See McAfee Analysis at 10 - 12.

⁵⁴ / McAfee Analysis at 11.

not require existing roaming agreements to be changed or reworked, as long as the roaming rates under these agreements do not exceed the providing carrier's lowest prevailing retail rates. This approach will also serve to promote the effectiveness and use of commercially-negotiated roaming arrangements by providing all parties with common points of reference in negotiating, developing, and finalizing a roaming agreement.

E. This Proposal Promotes and Ensures Consumer Access to Mobile Wireless Services

Over the course of this proceeding, it is important not to lose sight of the fact that the focus is – and should be – on the impact that the availability of automatic roaming has on U.S. consumers wherever they travel. Within this context, nothing has a greater impact on U.S. consumers than access to reasonably-priced mobile wireless services. As several commenters have noted, consumers increasingly demand and expect to have access to mobile wireless service when traveling outside of their home market. ⁵⁵
Furthermore, as SouthernLINC Wireless discussed in detail in its initial comments in this proceeding, the ability of all U.S. consumers to access mobile wireless services, whether through their "home" carrier or through automatic roaming, significantly benefits economic growth and public safety and security as well. ⁵⁶

Because no carrier has truly ubiquitous service throughout the United States,⁵⁷ carriers can only provide such service if they are able to obtain automatic roaming service at a reasonable rate. SouthernLINC Wireless' proposal to require carriers to provide

See, e.g., Comments of T-Mobile at 2 ("...the success of any wireless carrier is rooted in whether it can meet consumer demand for affordable wireless services wherever consumers require access."); Comments of Centennial Communications at 2 ("Customers simply expect their wireless phones to work wherever they are.").

 $^{^{56}}$ / See Comments of SouthernLINC Wireless at 15 - 30.

⁵⁷ / Comments of Verizon Wireless at 2.

inbound automatic roaming upon request will ensure that all carriers, regardless of size, will be able to provide their customers with access to wireless service even when they travel outside of their carrier's service territory. In turn, this guaranteed mobility will at last enable the realization of the "seamless, nationwide 'network of networks" envisioned by the Commission.⁵⁸

F. Most Regional Carriers Agree on the Need For a Rule and For Changes in the Complaint and Enforcement Procedures

Finally, SouthernLINC Wireless submits that its proposal reflects the position of many regional CMRS carriers throughout the United States. As discussed above, nearly every regional or rural carrier that has submitted comments in this proceeding agrees on the need for Commission action that would require the provision of automatic roaming at reasonable rates and on reasonable and nondiscriminatory terms and conditions, as well as the need for the Commission to revisit its complaint and enforcement procedures and policies for roaming issues. ⁵⁹ When read together, the comments filed by these carriers, including SouthernLINC Wireless, demonstrate the commonality of their positions and show that they are not far apart, even on the details of how these changes should be implemented. A number of carriers have expressed agreement with the "CMRS Roaming Principles," which provide a concise roadmap of the action the Commission needs to take in this proceeding.

 $^{^{58}}$ / NPRM at ¶ 8 (internal citations omitted).

⁵⁹ / See, e.g., Comments of SouthernLINC Wireless; Comments of Leap Wireless; Comments of MetroPCS; Comments of ACS Wireless; Joint Comments of AIRPEAK and Airtel; Reply Comments of Unicom, Inc.; Comments of US Cellular; Comments of Centennial Communications; Comments of the National Telecommunications Cooperative Association (NTCA); Joint Comments of RTG and OPASTCO.

IV. THE POSITION TAKEN BY SPRINT NEXTEL IS AN EXAMPLE OF WHY A RULE IS NECESSARY

Ironically, in its comments opposing any Commission action to require automatic roaming, Sprint Nextel has provided perhaps the clearest example of why such a rule is in fact necessary.

As described in its initial comments, as well as in numerous filings in other proceedings, SouthernLINC Wireless has been experiencing extraordinary difficulties for over ten years in its attempts to obtain reasonable automatic roaming agreements with Sprint Nextel and Nextel Partners. As SouthernLINC Wireless noted in its initial comments, neither Sprint Nextel nor Nextel Partners have ever seriously challenged any of the details regarding these difficulties. Sprint Nextel and Nextel Partners have once again refused to address or even acknowledge these issues in their comments in this proceeding, with Sprint Nextel going so far as to baldly state that there is "no evidence of a market failure regarding access to roaming services" even though Sprint Nextel has itself used its market power to deny access to automatic roaming services to SouthernLINC Wireless for nearly a decade!

Sprint Nextel's position that it has "no duty to aid competitors" and has the right to "refuse to deal not only with its competitors, but also with the competitors of its affiliates" is both illuminating and alarming – and contrary to the Communications Act itself. This position reflects an attitude towards roaming that stands in stark contrast to

 $^{^{60}}$ / See, e.g., Comments of SouthernLINC Wireless at 11 - 15.

⁶¹ / Comments of SouthernLINC Wireless at 13.

^{62 /} Comments of Sprint Nextel at 12.

⁶³ / Comments of Sprint Nextel at 17, 20.

that expressed by the other nationwide carriers, who unanimously stated their support for the availability of automatic roaming and the importance of roaming to their own operations. Further, this position is based on an improper analytical framework that ignores the mandates of Title II of the Communications Act and which, if accepted, would effectively undercut the entire basis of common carrier regulation.

Therefore, the Commission must, at a minimum, address these claims and make it absolutely clear that <u>all</u> CMRS carriers – including Sprint Nextel – are subject to the duty under Sections 201 and 202 of the Communications Act to provide service upon reasonable request at reasonable rates and on reasonable and nondiscriminatory terms and conditions.

A. The FCC Must Address Their Claim of a Right to Refuse to Deal with Other Title II Common Carriers

Sprint Nextel's claim that it has the right to refuse to deal with other Title II common carriers regarding the provision of communications services is unprecedented and without support. Nevertheless, the Commission must address this claim in order to make clear that roaming, like all other common carrier services, must be provided in a timely manner upon reasonable request at reasonable rates and on reasonable and nondiscriminatory terms and conditions pursuant to Sections 201 and 202 of the Communications Act.

The Commission has long maintained that carriers who are experiencing difficulty with roaming have the option of filing a complaint under Section 208 of the Communications Act alleging violations of Section 201 and/or Section 202.⁶⁴ However, if the Commission were to accept Sprint Nextel's position, there would be no requirement

⁶⁴ / See, e.g., NPRM at \P ¶ 2, 34 (internal citations omitted).

that a carrier provide automatic roaming service in the first place, meaning that there could be no cognizable claim made under Title II and, thus, nothing to remedy. As discussed in more detail in Section VI of these reply comments, the uncertainty that currently exists regarding the extent of carrier roaming obligations under Sections 201 and 202 has deterred carriers from utilizing the Section 208 complaint process. Yet, under Sprint Nextel's analysis, even this option would be eliminated entirely, and carriers would be left with no recourse to address abusive market behavior.

B. Sprint Nextel's Position Illustrates the Lack of Competition in Wholesale Roaming Services Markets

Sprint Nextel's position is also one that would typically be taken by a monopolist and/or a company with market power in a non-competitive market, since it is not normal competitive behavior to turn away business.⁶⁵ This position stands in stark contrast to that expressed by the two nationwide GSM carriers, Cingular and T-Mobile, both of whom described in their comments a different view of roaming agreements.

Both Cingular and T-Mobile discussed the various incentives they have to enter into automatic roaming agreements with other carriers, including the incentive to receive roaming revenue rather than let that revenue go to the other nationwide GSM carrier. 66 While SouthernLINC Wireless cannot vouch for how these incentives translate to the actual roaming practices of these carriers, it is noteworthy that, even in the concentrated duopoly market for nationwide GSM roaming services, Cingular and T-Mobile recognize a measure of competitive incentive regarding their treatment of potential roaming

 $^{^{65}}$ / See McAfee Analysis at 17 - 18.

 $^{^{66}}$ / See Comments of Cingular at 11 - 12; Comments of T-Mobile at 7 - 9. Because it is not itself a GSM carrier, SouthernLINC Wireless is not in a position to comment on the actual roaming practices of Cingular or T-Mobile and will defer to other GSM carriers on that issue.

partners. By contrast, Sprint Nextel and Nextel Partners hold monopoly positions for the provision of wholesale iDEN roaming services in nearly all of their respective markets. Sprint Nextel and Nextel Partners have no economic incentive to offer fair and reasonable roaming terms or to offer any terms at all, and therefore they clearly feel free to refuse to deal not only with competitors, but with competitors of their affiliates (which itself may indicate impermissible collusive behavior under antitrust law).

Overall, this comparison between Sprint Nextel on the one hand and Cingular and T-Mobile on the other vividly illustrates the functional and economic distinctions between the highly competitive market for retail CMRS services and the less-competitive and more highly-concentrated market for wholesale roaming services.

C. Sprint Nextel is Using the Wrong Analytical Framework

In its comments, Sprint Nextel supported its position by providing an analysis based on antitrust law. However, as the Commission has stated, roaming is a common carrier service specifically subject to Title II of the Communications Act,⁶⁷ and all common carriers are subject to certain duties and obligations pursuant to the Communications Act that supersede any rights or obligations they may have under general antitrust law. For example, Section 201 of the Communications Act states: "It shall be the duty of every common carrier engaged in interstate or foreign communications by wire or radio to furnish such communication service upon reasonable request therefor." If Sprint Nextel's argument were to be accepted, then any CMRS carrier could similarly assert that it has the right to refuse to provide roaming service to

^{67 /} See, e.g., NPRM at 2 (internal citations omitted).

⁶⁸ / 47 U.S.C. § 201(a).

anyone it chooses, for whatever reason, thus undermining a key component of common carrier regulation.

V. A ROAMING RULE WOULD NOT AFFECT COMPETITION

A. An Automatic Roaming Rule Would Not Be a Disincentive to Network Build-out

Contrary to the arguments put forth by the nationwide carriers, ⁶⁹ SouthernLINC Wireless' proposal would not act as a disincentive to the build-out of networks and services. As a threshold matter, the nationwide carriers' argument presumes that smaller carriers have access to spectrum. However, the ability of carriers to build out or expand their network coverage is restricted by the lack of available spectrum, a finite and limited resource.

As Centennial Communications pointed out, "No matter how much time a small or regional provider has had to build out, it will *never* have a network that has the same nationwide scope as a national carrier. It is simply not licensed to build such a network."

In many parts of the country, there are simply no more licenses available for CMRS spectrum, and the existing licensees in these areas require this spectrum for their own needs and are thus highly unlikely to lease any of it to competitors or new entrants. The scarcity of available spectrum is a huge obstacle that prevents regional carriers from extending their networks. It is this obstacle, not roaming, that affects network decisions by smaller regional and rural carriers.

Where carriers already hold spectrum, they would still have the incentive to invest in constructing their own physical infrastructure rather than rely on the infrastructure of

 $^{^{69}}$ / See Comments of Cingular at 26; Comments of Verizon Wireless at 17 - 18; Comments of Nextel Partners at 8 - 9.

 $^{^{70}}$ / Comments of Centennial Communications at 8-9 (emphasis in original).

other carriers in the area. As MetroPCS stated, "While carriers may not charge 'unreasonable' prices for roaming services, MetroPCS expects that all such services that it acquires from other carriers will be provided at a profit. It therefore defies logic that MetroPCS or any other carrier would use in-market roaming in lieu of building out its own network – such behavior would either reduce its profits or increase the price it must charge its own customers (thereby reducing its market share), and also would increase the profitability of MetroPCS' competitors." SouthernLINC Wireless also agrees with the statement by MetroPCS that "any carrier that pursues a strategy based on roaming at the expense of building out its own network is not likely to remain in business."

SouthernLINC Wireless's proposal also allows carriers to recover their investment in new infrastructure through roaming rates that are capped at the retail rate level. As Dr. McAfee explains in his attached report, "Because a competitively set retail price (which accounts for the incentive to invest in the network) is used for network access under SouthernLINC's proposal, the incentive to invest is *not* undermined." To illustrate this point, Dr. McAfee provides an analysis of the impact of SouthernLINC Wireless' proposal on the ability of a carrier to recover its investment in constructing a new cell-site and tower in a new location. As his analysis demonstrates, the carrier would receive the same return from roaming customers as it would from its own best customers and, assuming that the retail market is indeed competitive, the incentive to

⁷¹ / Comments of MetroPCS at 29.

⁷² / Comments of MetroPCS at 30.

 $^{^{73}}$ / See McAfee Analysis at 10 - 12.

⁷⁴ / McAfee Analysis at 11 (emphasis in original).

 $^{^{75}}$ / McAfee Analysis at 10 - 11.

invest would not be undermined.⁷⁶ Furthermore, because SouthernLINC Wireless' proposed rule would make network use more efficient, the incentive to invest "may be enhanced."⁷⁷

B. SouthernLINC Wireless' Proposal Maintains and Promotes Retail Competition

The nationwide carriers argue that the adoption of any automatic roaming obligations would result in reduced competition in what they characterize as a highly competitive market. However, as previously discussed in Section II of these reply comments, retail CMRS services and wholesale roaming services are separate and distinct markets. The automatic roaming proposal put forth by SouthernLINC Wireless not only maintains retail competition but, in fact, *relies* on the continued competitiveness of the retail market to ensure the reasonableness of wholesale automatic roaming rates. Furthermore, SouthernLINC Wireless' proposal maintains the incentives that carriers have to invest in, develop, and deploy innovative new services, products, and technologies, and even introduces additional incentives by opening the door to additional revenue sources.

SouthernLINC Wireless' proposal requires only the provision of inbound automatic roaming services upon request at a rate that does not exceed the providing carrier's own retail rates. As discussed in Section III.B. of these reply comments, this provides carriers with the certainty regarding costs and network management that they require to develop and offer innovative and competitive retail rates and rate plans, such as regional or nationwide single-rate plans, unlimited flat-rate plans, etc.

⁷⁶ / McAfee Analysis at 11.

⁷⁷ / McAfee Analysis at 11.

Carriers would still have the incentive to invest in and develop new technologies and services under this approach because such innovation can still give them a competitive market advantage. For example, a carrier that is the first to deploy a new service or technology would still have the same "first-mover" advantage. As a practical matter, a potential roaming partner generally would not request roaming access to the new service and technology until it is already capable of providing the service to its own customers on its own network (requiring it to first invest in its own infrastructure and network), because: (i) a roaming service can only be provided if it is technically feasible, and some new services or technologies may also require the use of certain software or equipment, such as new handsets capable of using the service, that a potential roaming partner will need to provide to its subscribers and/or incorporate into its network; and (ii) it would make little business sense for a carrier in a highly competitive market to enable its customers to receive a service while roaming that they cannot receive on their own home network. If the service is sufficiently innovative or attractive, customers would view the other carrier's service as superior and could likely leave to become customers of the other carrier instead. In other words, the carrier will have effectively promoted the service of a competitor at its own expense.

If a potential roaming partner already provides the same or similar service to its own customers, a carrier in a truly competitive market would then have the incentive to provide automatic roaming for that service as a means of receiving additional revenue and additional return on its own investment in that service. Under SouthernLINC Wireless' proposal, this incentive is not only maintained but also reinforced, because the

carrier providing roaming would be able to recover costs plus at least a competitive profit margin.

C. Automatic Roaming Would Not Impact Network Coverage as a Basis for Competition or Market Differentiation

CMRS carriers compete in the retail market on the basis of several factors, including coverage. Under SouthernLINC Wireless' proposal, network coverage would continue to serve carriers as an effective market differentiator and basis for competition, particularly for the nationwide carriers and other carriers with larger networks.

First, customers of larger carriers are more likely to be "on-network" when accessing mobile wireless services, meaning that they are much less likely to incur roaming costs that would otherwise have to be either (i) passed through to the customer, which would limit the ability of the customer's "home" carrier to compete on price; or (ii) absorbed by the customer's "home" carrier, which would decrease the "home" carrier's margin. In addition, because customers of larger carriers are more likely to be "on-network," these carriers are able to maintain greater control over the quality and reliability of the service the customer receives both at home and when traveling. Either way, carriers with large networks would continue to have a competitive advantage based on the scope of their network coverage.

D. It Does Not Cost More to Support a Roamer than to Support a Carrier's Own Customer

In their comments, certain carriers have conveyed the impression that the adoption of any automatic roaming obligations will result in increased carrier costs in order to support roaming.⁷⁸ However, as explained by Dr. McAfee, a carrier's cost of

 $^{^{78}}$ / See, e.g., Comments of Cingular at 27 – 28; Comments of T-Mobile at 14 – 15; Comments of Nextel Partners at 4.

providing roaming service to another carrier's customers is likely to be less than the cost to the carrier of serving its own customers, since costs such as customer acquisition, customer service and support, and customer billing are not incurred when serving roamers. ⁷⁹ This same point is explained in greater detail in the economic analysis prepared for Leap Wireless by the ERS Group, ⁸⁰ which calculates that carriers "can incur costs of \$15 or more per retail customer per month for subscriber acquisition, billing and customer care that the operator does not incur for wholesale [roaming] minutes."⁸¹

In other words, SouthernLINC Wireless' proposal would not result in any increased costs for carriers to support roaming, since the costs they would incur to support a roamer would be roughly equivalent to or even less than the costs incurred in supporting their own subscribers. In addition, carriers would not only recover their costs but could also recover a competitive profit margin when supporting a roaming customer of another carrier under SouthernLINC Wireless' proposal.

VI. THERE ARE NO ADEQUATE SUBSTITUTES FOR AUTOMATIC ROAMING CAPABILITY

Some commenters in this proceeding who oppose the adoption of any automatic roaming obligations assert that such obligations are not needed because there are alternatives available such as pre-paid services and dual-mode handsets.⁸² However, these alternatives are not effective substitutes for automatic roaming either from a functional standpoint or from a consumer standpoint.

⁷⁹ / See Comments of SouthernLINC Wireless, Attachment B (McAfee Report) at 8; McAfee Analysis at 12.

 $^{^{80}}$ / Comments of Leap Wireless, Attachment A, ERS Report at 10 - 13.

 $^{^{81}}$ / Comments of Leap Wireless, Attachment A, ERS Report at 11 - 12.

See Comments of Nextel Partners at 9-11; Comments of T-Mobile at 20-21.

A. Dual-Mode and Multi-Mode Handsets

Currently there are only a limited number of dual-mode handsets available on the market, such as the Samsung A790/795 and Motorola A840 CDMA/GSM handsets and the Motorola i930 iDEN/GSM handset. All three of these handsets are specifically designed and marketed to allow U.S. customers of CDMA and iDEN carriers to be able to use their handsets when traveling internationally. However, it is not clear how easily or widely these customers can use these handsets to roam onto GSM networks within the United States, given that this would require an automatic roaming agreement between the CDMA or iDEN carrier and a U.S. GSM carrier, which none of the commenters in this proceeding claimed to have.

More significantly, all three of these handsets are very expensive, with discounted prices for new customers signing two-year service agreements ranging from \$350.00 to \$400.00.85 It is highly unlikely that a significant number of customers, other than those who are extensive international travelers, would be willing to pay such a high cost simply for increased domestic roaming options, thus making these handsets commercially impractical for most carriers. In fact, SouthernLINC Wireless itself evaluated the

The Samsung A-790 and Motorola i930 are offered by Sprint Nextel. *See* http://www1.sprintpcs.com/explore/PhonesAccessories/PhoneDetails.jsp?FOLDER%3C%3Efolder_id=1647067&CURRENT_USER%3C%3EATR_SCID=ECOMM&CURRENT_USER%3C%3EATR_PCode=None&CURRENT_USER%3C%3EATR_cartState=g roup&bmUID=1137968020717&navLocator=%7Cshop%7CphonesAccessories%7CallPhones%7C&selectSkuId=samsungipa790&FOLDER%3C%3Efolder_id=1476015&CURRENT_USER%3C%3EATR_SCID=ECOMM (Samsung A-790) *and* (last accessed Jan. 23, 2006). The Samsung A-795 and Motorola A840 are offered by Verizon Wireless. *See* http://www.verizonwireless.com/b2c/mobileoptions/internationalsvcs/globalphone/index.jsp (last accessed Jan. 23, 2006).

⁸⁴ / See Sprint Nextel and Verizon Wireless website addresses provided in note 83 above.

⁸⁵ / *Id*.

possibility of offering the Motorola i930 iDEN/GSM handset to its own customers, but it quickly determined that the cost was simply too high to attract enough customers to justify the necessary investment. Furthermore, reliance on just one handset for roaming means that customers can "choose" only one handset – and an expensive one at that – when the customers of all other competitors in the retail CMRS market face no such limitations.

T-Mobile also pointed to additional multi-mode handsets that are under development, as well as the potential for software-defined radio (SDR) technology to overcome the obstacle of differing air interfaces. ⁸⁶ Furthermore, Sprint Nextel is reportedly working to develop and introduce a dual-mode iDEN/CDMA handset. ⁸⁷ However, none of these proposed dual-mode and multi-mode handsets are currently available, nor is it certain when (or if) they will be introduced or whether – as with the current dual-mode handsets – they may prove to be too costly to appeal to more than a small, select group of users. As SouthernLINC Wireless stated in its initial comments, the fact that none of these handsets exists means that no one can determine whether such handsets could, in fact, overcome some of the current technological obstacles to roaming, and the Commission cannot base any determinations it should make in this proceeding on such speculation. ⁸⁸

 $^{^{86}}$ / Comments of T-Mobile at 20 - 21.

See, e.g., Applications of Nextel Communications, Inc. Transferor, and Sprint Corporation, Transferee, For Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 05-63 ("Sprint/Nextel Merger Application") at ¶ 25.

⁸⁸ / Comments of SouthernLINC Wireless at 43.

B. Prepaid Services

Nextel Partners claimed that prepaid services also provide an alternative to automatic roaming, arguing that a consumer "could very easily purchase a prepaid phone to use on occasions when the customer travels off its carrier's network" and use the "call-forward" feature on his or her regular phone. ⁸⁹ This solution is hardly consumer-friendly.

Forcing consumers to use prepaid services in order to have access to wireless services when they are outside of their "home" carrier's footprint is just as cumbersome and problematic as manual roaming, if not more so. This approach would require a consumer to purchase a separate phone (typically offered for about \$50.00 by most prepaid service providers), as well as pay an activation fee and purchase an initial package of airtime minutes. Any airtime minutes that the consumer purchases must typically be used within a certain period, with any unused minutes lost at the end of that period unless the consumer pays an additional fee and/or purchases additional minutes to keep the account active. If the consumer allows the prepaid account to lapse (for example, after being back home for a few months), then he or she may be compelled to go through the entire process again except for the purchase of the handset (i.e., pay an activation fee, purchase a package of airtime minutes, etc.). The inconvenience of this approach would be further magnified for consumers who are "post-paying" customers of their home carrier and who typically do not have to concern themselves with metering their usage or replenishing their supply of minutes when these minutes run low or are about to expire.

 $^{^{89}}$ / Comments of Nextel Partners at 9-11.

Overall, while prepaid services may provide an attractive service option to those who use it as their primary source of wireless communications, the various costs, fees, and other terms and conditions of such services dramatically limit their attractiveness and effectiveness as a temporary wireless service alternative.

VII. THE RECORD DEMONSTRATES THE INADEQUACY OF THE CURRENT COMPLAINT PROCESS FOR ADDRESSING ROAMING ISSUES

According to the nationwide carriers, there is no need for the Commission to adopt any automatic roaming obligations into its regulations because carriers experiencing difficulties in obtaining reasonable roaming services have recourse to the Section 208 complaint process, which allows them to file a complaint alleging that a given carrier's roaming practices or demands violate Section 201 and/or 202 of the Communications Act. They further argue that the record shows a lack of such complaints, thus demonstrating that there are no serious problems regarding CMRS roaming. However, the nationwide carriers have drawn the wrong conclusion from this record.

The fundamental obstacle preventing carriers from pursuing a complaint under Section 201 or 202 is the lack of any certainty or clarity regarding the actual applicability of these provisions given the absence of a specific roaming obligation under the Commission's current rules. Although the Commission has stated that roaming is a common carrier service subject to the provisions of Title II of the Communications Act, including Sections 201 and 202, the Commission has to date explicitly and repeatedly

⁹⁰ / See Comments of Cingular at 21; Comments of Verizon Wireless at 16; Comments of T-Mobile at 18 − 19; Comments of Sprint Nextel at 2.

⁹¹ / See, e.g., Comments of Cingular at 21; Comments of Nextel Partners at 6.

refused to find that carriers have any obligation to provide automatic roaming services.

This raises the question of how a potential petitioner can be expected to demonstrate that a given carrier's rates, terms and conditions for roaming – or complete refusal to provide automatic roaming services at all – constitute unjust, unreasonable, or discriminatory practices when there is no clear obligation for the carrier to provide the service in the first place.

The comments submitted by the nationwide carriers make it abundantly clear that they do not believe that they have any obligation to provide automatic roaming services and that they are prepared to offer such services only when it is to their commercial and competitive benefit – a view most graphically illustrated in the comments of Sprint Nextel. As discussed previously in these reply comments, Sprint Nextel claims that it has the right to "refuse to deal not only with its competitors, but also with the competitors of its affiliates" in the provision roaming, 93 even though the Commission has previously identified roaming as a Title II common carrier service.

Under the reasoning expressed by Sprint Nextel and the other nationwide carriers, any decision they make regarding the provision of automatic roaming services – including the rates, terms, and conditions they demand or whether to even make roaming available – would be inherently "reasonable" and thus provide no basis for a Section 201 or 202 complaint under the Commission's current rules. With no basis for a complaint,

 $^{^{92}}$ / Comments of Sprint Nextel at 17 – 21; See also Comments of Nextel Partners at 6 – 8 ("Only Nextel Partners – not the Commission, and not other carriers – can decide whether it is a good business decision to proceed [with a roaming agreement] on the facts presented.").

^{93 /} Comments of Sprint Nextel at 20.

there is nothing for the Commission to remedy, and carriers unable to obtain reasonable roaming arrangements are left without recourse.

The Commission itself has also failed to provide any guidance, direction, or clarification as to what types of roaming practices it may consider to be "unjust and unreasonable," meaning that a potential petitioner has no way of knowing – prior to expending the substantial time, costs, and resources necessary to bring a complaint – what, if any, claims the Commission will even consider cognizable, let alone the type or extent of relief that the Commission may provide should the petitioner ultimately prevail.

Overall, the current Section 208 complaint process cannot be considered an adequate remedy for abuses of market power in the provision of wholesale automatic roaming services unless and until the Commission adopts automatic roaming obligations for all CMRS carriers.

VIII. OTHER ISSUES

In addition to the foregoing, SouthernLINC Wireless takes this opportunity to respond to certain other issues raised by participants in this proceeding. These are discussed below.

A. There Should Be No Exceptions to a Carrier's Automatic Roaming Obligations

Certain carriers who oppose the adoption of an automatic roaming rule also argue that, should such a rule be adopted, certain exceptions should be made. SouthernLINC Wireless submits that its proposal is fair, balanced, economically sound, easy to administer, and provides the greatest benefit to U.S. consumers. SouthernLINC Wireless is firmly opposed to any exceptions or carve-outs, as these would only serve to drastically complicate a straightforward and non-intrusive regulatory scheme. SouthernLINC

Wireless is particularly opposed to the adoption of any exceptions, such as those suggested by certain commenters, as they would serve no purpose other than to allow a particular carrier to unfairly exploit market power.

1. Carriers Cannot be Allowed to Deny Roaming to Consumers for Certain Services or Technologies

SouthernLINC Wireless opposes any exceptions based on the type of service provided or the technology used. Automatic roaming obligations should and must be technology neutral in order to provide consumers with the greatest access possible to mobile wireless service anywhere in the United States. A wide variety of mobile wireless services – including interconnected voice, messaging, data, push-to-talk, etc. – are already being packaged together into single service offerings. Exceptions based on technology or service type would allow carriers to thwart consumer access to wireless services using definitional distinctions that either may not be relevant or which will quickly be rendered obsolete.

Any exceptions based on the type of technology or service would also provide carriers an opening to "game the system" by describing a service as something "unique" that cannot be offered to customers of other carriers. For example, Nextel Partners argues in its comments that any automatic roaming rule should not apply to its "Direct Connect" service, since this would require it "to provide to others a service it has

 $^{^{94}}$ / See Comments of Nextel Partners at 12-13 (requesting that any automatic roaming obligations be limited to interconnected voice services only); Comments of Verizon Wireless at 22; Comments of T-Mobile at 19-20.

⁹⁵ / See Comments of US Cellular (urging that automatic roaming be available for data services); Comments of ACS Wireless; ACS Wireless Ex Parte Notice. SouthernLINC Wireless again notes that the Commission possesses the necessary authority and jurisdiction pursuant to Title III of the Communications Act. See ACS Wireless Ex Parte Notice at 2.

developed in order to differentiate itself from its competitors." This assertion is disingenuous at best. "Direct Connect" is simply a Nextel trade name for the service it provides using the digital dispatch/PTT function of the iDEN platform – a function designed and developed by Motorola and utilized by all iDEN-based carriers, including SouthernLINC Wireless. As a practical matter, the only real difference between "Direct Connect" and SouthernLINC Wireless' "InstantLINC" service is that Sprint Nextel and Nextel Partners refuse to provide roaming for this service to InstantLINC subscribers while providing roaming to each other's subscribers at no cost. 98

As previously discussed in Section V of these reply comments, carriers would continue to have ample incentive to invest in and develop new services and technologies under SouthernLINC Wireless' proposal, since potential roaming partners would generally not request roaming access unless they are already capable of providing the service to their own customers. Carriers would also be able to receive additional revenue and additional return on their investment through the provision of inbound roaming. Nevertheless, carriers who currently assert that market forces alone are sufficient to make automatic roaming widely available are at the same time refusing to provide roaming access to customers who already receive these services from their "home" carriers.

At present, Sprint Nextel and Nextel Partners refuse to provide SouthernLINC Wireless customers with roaming access for digital dispatch/PTT and data services – services that, as discussed above, have long been provided on SouthernLINC Wireless'

⁹⁶ / Comments of Nextel Partners at 12.

⁹⁷ / SouthernLINC Wireless notes that it has been providing its "InstantLINC" digital dispatch service commercially since 1996, three years before Nextel Partners was even established.

⁹⁸ / Comments of Nextel Partners at 2, 3, and note 8.

own iDEN network. Likewise, ACS Wireless has invested in, deployed, and currently offers its own EV-DO mobile broadband service in Alaska, yet it has been unable to obtain an automatic roaming agreement with any EV-DO provider in the "lower forty-eight," even in the absence of any overlapping service areas between these carriers — none of whom operates in Alaska — and ACS Wireless.⁹⁹ These are perhaps the clearest examples of why any service or technology-based exceptions to a carrier's automatic roaming obligations would undermine the establishment of a "seamless, nationwide network of networks" providing all U.S. consumers with ubiquitous access to mobile wireless services.

2. Market-Based "Carve-Outs" Are Not in the Public Interest

Verizon Wireless has argued that any automatic roaming rule adopted by the Commission should not require carriers to provide automatic roaming services to facilities-based carriers in the same market: *i.e.*, "home roaming" or "in-market roaming." SouthernLINC Wireless agrees with MetroPCS that the justification proffered by Verizon Wireless for such an exception – that "home roaming" is a disincentive to network build-out – is without merit, as explained in more detail in MetroPCS' initial comments as well as in Section V.A. of these reply comments. ¹⁰¹

SouthernLINC Wireless also believes that, from a public policy perspective, this exception is unnecessary, unwarranted, and one that – if adopted – would be open to abuse. Such an exception would require the Commission to become involved in complex and highly subjective line-drawing arguments as to how the appropriate "market" should

⁹⁹ / Comments of ACS Wireless; ACS Wireless *Ex Parte* Notice.

 $^{^{100}}$ / Comments of Verizon Wireless at 17 - 18.

 $^{^{101}}$ / Comments of MetroPCS at 29 - 31.

be defined and, whenever or wherever invoked, would ultimately result in the denial of consumer access to wireless services. This requested exception would also enable large carriers to effectively isolate the customers of any smaller carrier whose service area lies within the large carrier's claimed "market" by making roaming access to wireless service unavailable to them.

B. A "Tier IV" Category is Not Needed and is Unnecessary

SouthernLINC Wireless agrees that there is no need for the Commission to create a "Tier IV" category of small carriers eligible for special regulatory protection regarding automatic roaming. This approach would establish disparate regulatory treatment of CMRS carriers determined by an arbitrary limit on the number of customers a carrier serves. The record of this proceeding demonstrates that issues regarding automatic roaming rates and access affect a broad range of carriers of all sizes and that there is no justification for the creation of a separate carrier class.

In contrast, SouthernLINC Wireless' proposal would apply equally to all carriers of all sizes, thus conferring benefits to all wireless consumers. SouthernLINC Wireless further submits that its proposal effectively addresses serious issues raised by small rural carriers by providing them the means to offer rural customers the ability to access wireless services on a fair and reasonable basis when traveling outside of their rural service area.

 $^{^{102}}$ / See Comments of Verizon Wireless at 20-22 (opposing the adoption of specific roaming rules for "Tier IV" carriers).

 $^{^{103}}$ / Comments of Verizon Wireless at 20 - 22.

IX. CONCLUSION

SouthernLINC Wireless again applauds the Commission for recognizing the need to revisit the current regulatory and market landscape for CMRS roaming services and initiating the instant proceeding. As the record of this proceeding clearly demonstrates, market forces alone have not been sufficient to ensure the availability of reasonable automatic roaming services that would provide all U.S. consumers with ubiquitous nationwide access to mobile wireless services.

SouthernLINC Wireless urges the Commission to take immediate action to address the problems identified by numerous carriers in this proceeding – all of which harm wireless consumers. SouthernLINC Wireless recommends that the Commission adopt its proposals and the underlying "CMRS Roaming Principles" in order to ensure the development and availability of automatic roaming services and to ensure that all U.S. consumers will have equal access to ubiquitous mobile wireless services nationwide.

WHEREFORE, THE PREMISES CONSIDERED, SouthernLINC Wireless

respectfully requests the Commission to take action in this docket consistent with the views expressed herein.

Respectfully submitted,

Min Min

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Dated: January 26, 2006

CERTIFICATE OF SERVICE

I, Merline Wilkins, do hereby certify that on this 26th day of January, 2006, a copy of the foregoing Reply Comments of SouthernLINC Wireless in the Matter of Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, was submitted electronically to the Federal Communications Commission and served via electronic mail upon the following:

Chairman Kevin J. Martin Federal Communications Commission 445th Street, S.W. Washington, D.C. 20554

Commissioner Deborah Taylor Tate **Federal Communications Commission** 445 12th Street, S.W. Washington, D.C. 20554

Marlene Dortch, Secretary

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/s/ Merline Wilkins
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ATTACHMENT A CMRS Roaming Principles

CMRS Roaming Principles

Roaming services are an essential component of mobile telecommunications services and fulfill an important public safety role. Ensuring that consumers have near ubiquitous access to roaming services, no matter where they travel, is in the public interest. Access to roaming services is particularly critical for consumers who are underserved or who live in rural and remote areas with fewer competitive options. Access to roaming services fosters competition in the wireless market and encourages new entrants. Given the importance of roaming services, the FCC should adopt rules to facilitate automatic roaming for all wireless customers based upon the following principles:

- Carriers must provide in-bound automatic roaming (i.e., permitting another carrier's
 customers to roam onto its network) to any requesting carrier with a technologically
 compatible air interface. All services that a carrier is currently offering (e.g., voice, data,
 dispatch) must be offered to a requesting carrier with a technologically compatible air
 interface.
- Carriers must provide in-bound automatic roaming services under rates, terms and conditions
 that are just, reasonable and non-discriminatory. In this respect, the FCC clarifies that
 Sections 201 and 202 do apply to roaming services.
- Carriers must negotiate in good faith.
 - > FCC involvement is required only if a complaint is filed.
- The §208 complaint process should be strengthened to ensure it is an effective avenue for redress. To do so the FCC should incorporate the following presumptions:
 - A reasonable rate presumption. FCC should adopt the presumption that a just and reasonable wholesale rate for roaming cannot be higher than the carrier's best retail rate or average retail rate per minute.
 - A technical feasibility presumption. If a carrier is already providing roaming service (data, voice, dispatch) to other carriers using the same air interface then the roaming service will be presumed to be technically feasible (shifting the burden of proving it is not technically feasible)
 - A rapid response mechanism. Because of the competitive nature of the wireless industry, complaints cannot be allowed to languish indefinitely. Therefore, roaming complaints will be placed on the Enforcement Bureau's Accelerated Docket under Section 1.730 of the Commission's Rules.

ATTACHMENT B

Analysis:

The Economics of Wholesale Roaming in CMRS Markets: Reply Comments

R. Preston McAfee

Before the

Federal Communications Commission

Washington, DC 20554

In the matter of)	
)	
Reexamination of Roaming Obligations)	WT Docket No. 05-265
of Commercial Mobile Radio Service)	
Providers)	

The Economics of Wholesale Roaming in CMRS Markets: Reply Comments

R. Preston McAfee

J. Stanley Johnson Professor of Business, Economics, and Management

California Institute of Technology

January 26, 2006

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	Wholesale vs. Retail Market Competition

I. Introduction and Summary of Conclusions

The Federal Communications Commission ("FCC" or "the Commission") issued a Memorandum Opinion and Order and Notice of Proposed Rulemaking ("MOO/NPRM") reviewing the need for modification of rules regarding roaming requirements, including automatic roaming requirements ("ARR"s).¹

In my comments filed on behalf of SouthernLINC Wireless ("SouthernLINC"), I noted that four large national Commercial Mobile Radio Services ("CMRS") operators — Cingular Wireless ("Cingular"), Sprint Nextel Corporation ("Sprint Nextel"), T-Mobile USA ("T-Mobile"), and Verizon Wireless ("Verizon") (collectively "the national carriers") — not only dominate retail CMRS markets but also control a large share of the available CMRS spectrum. I also noted that although competition for *retail* CMRS services may be vigorous, competition in the *wholesale* markets for roaming service is less robust. In particular, although carriers utilizing distinct technologies, like iDEN, GSM, and CDMA, may compete for consumers at the retail level, there is no competition across technologies at the wholesale level because wireless subscribers using one digital technology cannot roam onto the network of a different digital technology. For this reason, a firm with market power in a regional wholesale roaming market can maintain price above competitive levels. The data presented in my comments demonstrated that the wholesale market for iDEN roaming services is a monopoly in all Basic Trading

¹ See, Memorandum Opinion and Order and Notice of Proposed Rulemaking, *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, FCC 05-160 (released August 31, 2005).

The availability of dual-mode handsets does not change the conclusion that wholesale markets are technology-specific since the current availability and use of dual-mode handsets is limited.

Areas ("BTA"s). The data also showed that in most BTAs there are just two suppliers of GSM wholesale roaming and either two or three suppliers of CDMA wholesale roaming.³

In my comments, I also considered the circumstances when national carriers would have an incentive to foreclose their regional competitors by charging wholesale roaming rates in excess of the rates paid by the national carriers' retail customers.⁴ Since technology does not permit resale of retail wireless minutes, the national carriers have the ability, in addition to the incentive, to set wholesale roaming rates above retail rates.

In response to the MOO/NPRM, several parties filed comments regarding the need for an ARR. In denying any need for an ARR, none of the four national carriers distinguished between the markets for wholesale and retail services. In addition, some national carriers also failed to distinguish between different technologies (e.g., GSM vs. CDMA) in wholesale markets as well as different services (voice vs. data) in wholesale markets. In Section II, I explain why there exist regional technology-specific wholesale markets for roaming that are distinct from any retail market. The need for an ARR must be evaluated in light of this distinction.

In their comments, the national carriers argued that an ARR would reduce their incentives to invest in their network. In Section III, I explain why SouthernLINC's proposal regarding the maximum wholesale roaming rate that a carrier may offer does not undermine the incentives of national carriers to invest in their network infrastructure.

In Section IV, I explain why SouthernLINC's proposal to cap wholesale rates at the best available retail rate will increase consumer welfare. This is important because

³ See, R. Preston McAfee, *The Economics of Wholesale Roaming in CMRS Markets*, filed on behalf of SouthernLINC Wireless ("McAfee Comments"), *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp.1-5.

⁴ See, McAfee Comments, pp. 12-13.

several regional carriers have filed comments demonstrating that Commission guidelines and enforcement procedures have not prevented the national carriers, who have both the incentive and ability to discriminate against and foreclose their regional rivals, from engaging in anti-competitive actions.⁵

Finally, in Section V, I analyze selected comments filed in response to the MOO/NPRM that are relevant to the need for an ARR. In particular, I refute certain arguments that have been advanced by opponents of an ARR in an apparent effort to confuse the issues.

My conclusions are as follows:

- 1. There exist relevant technology-specific regional wholesale antitrust markets for voice and data roaming services;
- 2. Capping wholesale rates at the best retail rate allows adequate incentives for investment in network infrastructure; and
- 3. Capping wholesale rates at the best retail rate will increase consumer welfare.

II. WHOLESALE VS. RETAIL MARKET COMPETITION

The national carriers argue that an ARR is unnecessary due to the competitiveness of retail markets for CMRS.⁶ However, this argument confuses competition in retail CMRS markets with competition in regional wholesale markets for roaming services. In part, this confusion stems from the absence of any relevant market definition analysis

⁵ See, e.g., Comments of NTCH, Inc., *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp. 3-4.

⁶ See, e.g., Comments of Cingular Wireless LLC, *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp. 18-22.

undertaken by the opponents of an ARR. Although Dr. Rosston's comments on behalf of Sprint-Nextel do cite the framework for market definition described in the Horizontal Merger Guidelines ("Merger Guidelines") of the U.S. Federal Trade Commission ("FTC") and the U.S. Department of Justice ("DOJ"), Dr. Rosston does not perform the analysis that he suggests is appropriate and merely points to the FCC's analysis of the Cingular-AT&T Wireless and Sprint-Nextel mergers in support of his claims regarding the relevant markets.⁷

However, the FCC's primary focus in analyzing the Cingular-AT&T Wireless⁸ and Sprint-Nextel⁹ mergers was on the overall level of competition in retail CMRS markets. Although the FCC did discuss the issue of wholesale roaming in the Cingular-AT&T Merger, it did not apply the Merger Guideline's "hypothetical monopolist" test to regional markets for wholesale roaming.¹⁰ For this reason, the market definition analyses in the FCC's decisions in those cases are not sufficient for determining the need for an ARR. In the remainder of this section, I explain why a proper application of the Merger Guidelines framework to the specific issue at hand – the need for an ARR for wholesale markets – implies that there exist regional technology-specific wholesale antitrust markets for roaming services that are distinct from any retail CMRS markets.

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⁷ See, Gregory L. Rosston, An Economic Analysis of How Competition Has Reduced High Roaming Charges, filed on behalf of Sprint Nextel Corporation ("Rosston Comments"), *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp. 11-14.

⁸ See, Memorandum Opinion and Order, Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket Nos. 04-70, 04-254, and 04-323, FCC 04-255 (released October 26, 2004).

⁹ See, Memorandum Opinion and Order, Applications of Nextel Communications, Inc. and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 05-63, FCC 05-148 (released August 8, 2005).

¹⁰ See, Memorandum Opinion and Order, Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket Nos. 04-70, 04-254, and 04-323, FCC 04-255 (released October 26, 2004), pp. 65-71.

According to the Merger Guidelines, absent price discrimination, a relevant antitrust product market is "a product or a group of products such that a hypothetical profit-maximizing firm that was the only present and future seller of those products ('monopolist') likely would impose at least a 'small but significant and nontransitory' increase in price."

Also absent price discrimination, a relevant antitrust geographic market is "a region such that a hypothetical monopolist that was the only present or future producer of the relevant product at locations in that region would profitably impose at least a 'small but significant and nontransitory' increase in price."

In addition, "[a] market is a group of products and a geographic area that is no bigger than necessary to satisfy this test."

With regard to the "small but significant and nontransitory" price increase, I note that, according to the Merger Guidelines, the FTC and DOJ "will use a price increase of five percent lasting for the foreseeable future."

In applying the Merger Guidelines framework to the issue of roaming, I note that voice and data roaming services are not substitutes for each other, whether at the wholesale or the retail level. That is, if a hypothetical monopolist of voice roaming services in a particular region imposed a small but significant and nontransitory price increase, the consumers of voice roaming services would not be able to defeat the price increase by substituting away to data roaming services, or vice versa. In addition, I also note that wholesale roaming services, whether voice or data, in one geographical region are not substitutes for wholesale roaming services in another geographical region. That is, if a hypothetical monopolist of wholesale roaming services in one region, for example

¹¹ Merger Guidelines, Section 1.11.

¹² Merger Guidelines, Section 1.21.

¹³ Merger Guidelines, Section 1.0.

¹⁴ Merger Guidelines, Section 1.11.

New York, imposed a small but significant and nontransitory price increase, then consumers of wholesale roaming services in New York could not defeat the price increase by substituting to wholesale roaming services in Miami.

I now examine whether there exist technology-specific regional wholesale markets for voice and data roaming services. For example, suppose that a hypothetical monopolist attempts to impose a small but significant and nontransitory price increase for CDMA voice wholesale roaming services in a particular region. To what alternatives could a wholesale consumer substitute in order to defeat such a price increase? Clearly, there is no possibility of arbitrage between the retail and wholesale levels, because, for example, Sprint/Nextel's retail customers cannot resell their roaming minutes to SouthernLINC in order to defeat a price increase imposed on SouthernLINC by Sprint/Nextel at the wholesale level. Similarly, retail customers of the other national CMRS operators cannot their resell minutes to SouthernLINC. Thus, arbitrage between the wholesale and retail levels is not possible.¹⁵

Absent arbitrage, one alternative available to wholesale consumers is to encourage their retail customers to use dual-mode handsets, which permit substitution across technologies at the individual customer level. However, my understanding is that dual-mode handsets are not widely used, due to both the significant additional costs of purchasing such handsets as well as the relative paucity of available handset designs as compared to single-mode handsets. For example, my understanding is that there is only

¹⁵ While CMRS technology allows call forwarding, there is no practical means for a retail customer to program a phone to transfer calls to or from a number belonging to a different customer.

one dual mode iDEN/GSM model handset currently available to retail customers¹⁶ and it is only being offered by Sprint Nextel. Moreover, that model, the i930, is among the most expensive handsets offered by Sprint Nextel.¹⁷ I also understand that dual mode GSM/CDMA handsets are primarily used by business travelers for international roaming.¹⁸ In addition, I understand that dual-mode iDEN/CDMA handsets have not yet been introduced. Thus, to date, SouthernLINC Wireless has not found it possible to offer dual-mode handsets to its customers at terms that would attract a significant portion of their customers.¹⁹ Moreover, customers that, for example, also need email, cameraphones, etc. may find it difficult or impossible to satisfy these needs given the limited variety of currently available dual-mode handsets, imposing substantial costs on such customers. Thus, substitution at the customer level will not defeat a hypothetical price increase in any reasonable time-frame.

The only remaining alternative available to wholesale consumers is to acquire spectrum and build their own networks in order to defeat the price increase by the hypothetical monopolist. However, this option will be substantially more expensive than

¹⁶ See

http://nextelonline.nextel.com/NASApp/onlinestore/en/Action/DisplayPhones?audience=INDIVIDUAL&id12=Personal Wireless;Phones&language=EN..

¹⁷ It is not clear that iDEN/GSM handsets can roam on all US GSM networks, which use different frequencies than the European Union and Asian GSM networks. See http://idenphones.motorola.com/idenProducts/phonesHome.do?phones=930, which indicates that the one dual mode iDEN/GSM phone works in GSM mode on some, but not all, the frequencies used for GSM in the US.

¹⁸ Even in the case of international roaming, dual-mode handsets are not necessarily the preferred option. For example, Vodafone, which operates a GSM network in the UK, does not suggest that its UK GSM subscribers use the Verizon CDMA network (which it is partly owned by Vodafone) while traveling in the U.S. Instead, Cingular, which operates a GSM network, is the preferred network for Vodafone's subscribers, while traveling in the U.S. See, http://www.vodafone-i.co.uk/abroad/ir/vfIntRoamingHome.do;jsessionid=619EDA66A0588026B589D2F44DCBBEF8?action=input&ICS=No&vfPassport=No&errorMsg=&country=us&tariff=&x=22&y=9">http://www.vodafone-i.co.uk/abroad/ir/vfIntRoamingHome.do;jsessionid=619EDA66A0588026B589D2F44DCBBEF8?action=input&ICS=No&vfPassport=No&errorMsg=&country=us&tariff=&x=22&y=9 (website last visited on December 27, 2005).

¹⁹ See, Reply Comments of SouthernLINC Wireless in *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, January 26, 2006, p. 33-34.

a five percent markup over retail prices charged by national carriers.²⁰ availability is very limited, especially for iDEN frequencies, but also for CDMA and GSM. A wholesale carrier serving a small portion of the country would need to acquire spectrum and build a network to cover the entire rest of the country to be obtain comparable substitute for the wholesale service provided by the nationwide carriers. And, in most markets, the firms with market power for wholesale roaming own all available spectrum for at least one of the main digital CMRS technologies.

The final step in the analysis is to examine the profitability of a price increase by a hypothetical monopolist. Here, I rely on the fact that in many markets, wholesale prices are already substantially above retail prices. That is, the national carriers have shown that it is profitable to exercise their market power by imposing wholesale prices that are in some cases an order of magnitude higher than the level required to satisfy the hypothetical monopoly test.

The evidence presented in this proceeding demonstrates that national carriers have been able to impose significant price premiums on regional carriers in technologyspecific wholesale roaming markets. For example, two associations of small carriers, RTG and OPASTCO, have filed comments indicating that their members pay roaming rates to national carriers ranging from \$0.35 to \$0.99 per minute with an average highest rate of \$0.52 per minute.²¹ NTCH filed comments indicating that it had to exit a region because the two CDMA national carriers from whom it could obtain roaming refused to provide service on reasonable terms – one of the national carriers offered NTCH roaming

²⁰ In addition, in some markets, the spectrum required to build a network may not be available.

²¹ See, Comments of the Rural Telecommunications Group, Inc. and The Organization for the Promotion and Advancement of Small Telecommunications Companies, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, p. 10.

at \$0.50 per minute with an additional \$0.15 per minute for long distance while the other national carrier apparently refused to even negotiate terms until after the current proceeding was initiated.²² Leap Wireless filed comments indicating that the average rate it pays the national carriers is \$0.28 per minute with the highest rates exceeding \$0.40 per minute.²³ These numbers are in stark contrast to the estimates of the average roaming revenues per minute presented by Dr. Rosston on behalf of Sprint Nextel, where he suggests that average roaming revenues per minute have been below \$0.10 per minute for the past few years.²⁴ Similarly, calculations performed by Leap Wireless indicate that the national carriers obtain gross revenues per minute from their retail customers on the order of \$0.03 to \$0.15 per minute.²⁵ Were such rates the prevailing wholesale rates, the proposal to cap wholesale rates at the best retail rate would be superfluous, but they are not.

Similar reasoning to that outlined above for voice roaming services also applies for data roaming services. Thus, as the foregoing discussion illustrates, there exist relevant technology-specific regional wholesale antitrust markets for voice and data roaming services.

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See, Comments of NTCH, Inc., Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, pp. 3-4.
 See, Comments of Leap Wireless International, Inc., Declaration of Robert J. Irving, Jr., Reexamination

²³ See, Comments of Leap Wireless International, Inc., Declaration of Robert J. Irving, Jr., Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, p. 2.

²⁴ See, Rosston Comments, pp. 7-8. I note that, as acknowledged by Dr. Rosston, and as discussed below, there are problems with Dr. Rosston's data and calculations.

²⁵ See, Comments of Leap Wireless International, Inc., Wholesale Pricing Methods of Nationwide Carriers Providing Commercial Mobile Radio Service: An Economic Analysis, ERS Group, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, Table 5, p. 13.

III. SOUTHERNLINC'S PROPOSAL PROVIDES ADEQUATE INCENTIVES FOR INVESTMENT IN NETWORK INFRASTRUCTURE

In its comments in this proceeding, SouthernLINC has supported (1) FCC mandated automatic roaming and (2) a requirement that a carrier's wholesale roaming rates in a region not exceed that carrier's lowest retail rate in that region.²⁶ Contrary to comments filed by the national carriers, an ARR, along with a requirement that a carrier's wholesale roaming rates in a region not exceed that carrier's lowest retail rate in that region will not undermine the incentive to build networks.

A straightforward way to understand that an ARR with a wholesale price cap at the retail level will not damage the incentive to build a network is to examine the return on putting up a cell-site and tower in a new location. The question is whether the ARR SouthernLINC Wireless proposes will still allow the firm putting in the cell-site to recover its investment. The following explains why this would be the case.

A cell-site will have a fixed cost. I let *F* denote the monthly charge needed to amortize these fixed costs. In addition, I let *mc* denote marginal costs associated with traffic at this cell-site. The ARR will allow a competitive return, provided average revenues exceed the average fixed costs and marginal costs.

When the retail market is competitive and charges are based on consumer usage, the charges to customers must exactly cover the sum of average fixed costs and traffic sensitive costs, so that the following equation is satisfied for a customer:

$$s \times F + mc \times q = M + r \times q$$

²⁶ See, Comments of SouthernLINC Wireless in *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp. ii-iii.

where M is the monthly charge and r is the per minute charge for that customer, and s represents the share of the fixed cost, F, recovered from that customer. (Note that different customers obtain different bundles of monthly and per minute charges.) Under the ARR, the builder of infrastructure obtains the best average price, $\frac{M+r\times q}{q}$, times the quantity, and thus obtains the same return from roaming customers as is obtained from its own best customers. Thus, if the retail market is competitive, as is claimed by the national carriers, then the incentive to invest is not undermined by the ARR, and, indeed, because an ARR makes network use more efficient, may be enhanced by the ARR.

It is important to understand that the usual argument²⁷ against automatic network access arising from a muted incentive to invest depends on wholesale prices that are set lower than retail levels. This argument does not apply when the cap on ARR rates is equal to competitively set retail rates, as is the case with the SouthernLINC proposal. The usual argument against the ARR applies when regulation sets rates based on estimates of marginal or incremental costs. Such charges may, in fact, undermine the incentive to invest. Because a competitively set retail price (which accounts for the incentive to invest in the network) is used for network access under SouthernLINC's proposal, the incentive to invest is *not* undermined.

Moreover, this conclusion extends to the case of a price discriminating retail seller as well. In the theory of price discrimination, the seller offers, for each quantity, a total charge. (This may be implemented as a monthly charge plus a marginal charge.)

The relevant conclusion is that the customers who purchase the largest number of units

²⁷See e.g. comments of Sprint Nextel, *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp. 19-20.

are in fact the most profitable customers and, thus, create the largest incentive to invest in infrastructure. SouthernLINC's proposal ensures that the return associated with these most-profitable customers is offered for roaming.²⁸

The national carriers claim that an ARR would adversely impact the investments that carriers make in their networks.²⁹ They provide no evidence to support this claim. This is because the only way that the incentive to invest could be undermined is if the retail market is in fact not very competitive. In addition, as discussed in my prior comments in this proceeding, a carrier's cost of providing roaming service to another carrier's customers is likely to be less than the cost of serving a carrier's own customers due to avoided customer acquisition, service, and billing costs.³⁰ For these reasons, SouthernLINC's proposal provides adequate incentives for investment in network infrastructure.³¹

IV. SOUTHERNLINC'S PROPOSAL WILL IMPROVE CONSUMER WELFARE

The national carriers have claimed that an ARR will not improve consumer welfare.³² Thus, Dr. Rosston, on behalf of Sprint Nextel, claims that "petitioners who advocate a mandatory roaming rule do not argue that *consumers* have been harmed by the absence of a rule. Instead, they focus on loss of revenues to some competing *firms*. Loss

²⁸ Note that if the retail market is not competitive, then an ARR can reduce the ability of sellers to exercise their market power to price discriminate and thereby reduce the return on investment. However, if the retail level is as competitive as claimed by the national carriers, then this effect will negligible.

²⁹ See, e.g., Comments of Cingular Wireless LLC, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, p. 26.

³⁰ See, McAfee Comments, pp. 8-10.

³¹Much of the roaming costs are independent of roaming traffic. The traffic dependent portion of roaming charges are less than \$.02 per minute.

³² See, e.g., Comments of T-Mobile USA, Inc., Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, p. 13.

of revenues to particular firms, however, does not imply any market failure or consumer harm and does not justify regulatory intervention."³³ In this section, I expand on my original comments concerning why SouthernLINC's proposal will improve consumer welfare.

As explained in my prior comments, the national carriers have both the incentive and the ability to foreclose regional carriers by charging wholesale roaming rates that exceed the rates paid by the national carriers' retail customers under certain conditions.³⁴ Second, as discussed above, comments filed by regional carriers provide evidence that the national carriers have, in fact, effectively foreclosed regional carriers either by charging wholesale roaming rates that exceed rates offered to retail customers or by refusing to provide roaming access. Contrary to the claims of the national carriers³⁵, such foreclosure is evidence of the exercise of market power. An ARR, by preventing national carriers from foreclosing the regional carriers, would enhance the choices available to consumers, and hence improve consumer welfare.

In addition, some regional carriers, including SouthernLINC Wireless, Airpeak and Airtel, offer services to customers who place a high value of specific CMRS services, such as near instantaneous push-to-talk service and high reliability, which may not be provided by the national carriers or in all areas of the country. Other regional carriers, including Leap Wireless, serve customers who have a different profile than the customers

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³³ Rosston Comments, pp. 4-5.

³⁴ See, McAfee Comments, pp. 12-13.

³⁵ See, e.g., Comments of Cingular, pp. 18, 21 and 22, and Comments of Verizon Wireless, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, pp. 7, 15 and 17, and Comments of Sprint Nextel, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, November 28, 2005, pp. 2, 4, 12 and 17.

typically served by the national carriers.³⁶ These customers include low income customers and those with a poor credit history. An ARR increases consumer welfare by insuring the provision of roaming services to these customers.

Furthermore, in some rural regions, it may not be socially efficient for two carriers to build-out their networks to serve the entire region. In such regions, an ARR may increase both efficiency and consumer welfare by setting reasonable price for monopoly services.

It has also been argued that an ARR would be too cumbersome to implement in practice. For example, according to T-Mobile, "[the] costs of implementing an artificial automatic roaming requirement or a nondiscrimination requirement also far outweigh any alleged benefits of those requirements." Similarly, according to Dr. Rosston, on behalf of Sprint Nextel, "a mandatory roaming rule would be complicated, requiring substantial intervention in the market to set prices and determine whether carriers are 'similarly situated." However, as I explained in my prior comments in this proceeding, a requirement that a carrier's wholesale roaming rates in a region not exceed that carrier's lowest retail rate in that region is easily implemented, using information typically available on a carrier's website. This proposal does not involve auditing costs or other cumbersome regulatory interventions. Given the relatively low costs of implementing an ARR in practice, and the benefits of an ARR outlined above, an ARR will increase consumer welfare.

³⁶ See, Comments of Leap Wireless International, Inc., Declaration of Robert J. Irving, Jr., *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, November 28, 2005, pp. 1-2.

³⁷ See, T-Mobile USA, p. 16.

³⁸ Rosston Comments, p. 5.

³⁹ See, McAfee Comments, p. 17.

V. RESPONSES TO SELECTED COMMENTS BY OTHER CARRIERS

In this section, I address selected comments filed by other carriers in this proceeding that pertain to the need for an ARR.

A. Dr. Rosston presents figures that purport to show that, because industry-wide average roaming revenue per minute data, all CMRS markets, including both wholesale and retail, are competitive. 40 However, none of the data cited by Dr. Rosston is informative as to the competitiveness of wholesale roaming markets. The data cited by Dr. Rosston does not distinguish between retail customers roaming outside of their home service area on their own providers' network (on-net roaming) and customers roaming onto other carriers' networks (off-net roaming) . Dr. Rosston fails to even indicate whether the roaming revenues are for retail or wholesale service. In short, Dr. Rosston's data about roaming revenues provide no information whatsoever about competitiveness of wholesale roaming rates nor or prevailing wholesale roaming pricing rates. Rosston cites a decline in the average roaming revenue per minute over time as evidence of competitive roaming.⁴¹ He calculates roaming revenue per minute by dividing the reported roaming revenue for all carriers by the reported roaming minutes of use for all carriers. Between 1995 and 2004, reported roaming revenue increased from \$2.5 billion to \$4.2 billion while reported roaming minutes of use increased from 3.1 billion to 71.4

See Rosston Figures 2 and 3.
 See, Rosston Comments, pp. 4-9.

billion.⁴² However, the downward trend in roaming revenue per minute reported by Dr. Rosston does not imply that the wholesale roaming rates offered by the national carriers to regional carriers like SouthernLINC are either reasonable or declining over time. That is, national carriers may offer lower roaming rates to their *retail* customers that result in a lower average roaming revenue per minute for the industry as a whole while at the same time offering supra-competitive wholesale roaming rates to carriers like SouthernLINC. Indeed, as described above, the national carriers have offered wholesale roaming services to regional carriers at prices that often exceed the average gross revenue per minute paid by the national carriers' retail customers. Thus, Dr. Rosston's claim that the average roaming revenue per minute has declined over time is not informative as to the competitiveness of wholesale roaming rates. It confounds two separate markets.

In addition, the CTIA survey data cited by Dr. Rosston do not appear to distinguish between off-network and on-network roaming. The CTIA data cited by Dr. Rosston indicate that average roaming revenue per minute is below \$0.10 per minute. While Cingular does not levy additional charges for roaming, whether on- or off-network, Sprint, T-Mobile, and Verizon include on-network roaming in rate plans that include nationwide long-distance, but they collect roaming revenues from those subscribers who do not subscribe to one-rate or nationwide roaming plans. The rates that Sprint, T-Mobile, and Verizon charge for retail, off-network, roaming are all at least \$0.49 per minute, plus additional long-distance charges. Given that there is usually no additional charge for on-network roaming in certain plans offered by the national carriers, if such on-network roaming calls are included in the roaming minutes of use reported in the

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⁴² See, CTIA Wireless Industry Indices, Semi-Annual Data Survey Results, Year-End 2004 Results, June 2005, Tables 35 and 111.

⁴³ These rates are based on information available at the national carriers' websites on December 27, 2005.

CTIA survey data, then the decline in the average roaming revenue per minute need not accurately reflect off-network wholesale or retail roaming rates.

Verizon Wireless had also stated that roaming rates "are now only about ten percent of what they were ten years ago."44 Verizon Wireless also failed to distinguish between wholesale and retail roaming rates. Moreover, if roaming rates are now ten percent of what they were, and roaming charges, where they are imposed, can range above \$0.35 per minute and as high as \$0.99 per minute, then this suggests that ten years ago roaming charges were \$3.50 - \$9.99 per minute. 45 Clearly, Rosston and Verizon Wireless are reporting on roaming rates which are not the wholesale market rates that national carriers are charging the regional carriers for wholesale roaming. Indeed, the decline in retail roaming rates compared to wholesale roaming rates documents the exercise of market power in the wholesale market.

Nextel Partners' outright refusal to offer SouthernLINC Wireless or any other unaffiliated operator wholesale roaming service and Sprint Nextel's refusal to offer other iDEN operators wholesale roaming is further evidence that the wholesale roaming market is not competitive. There is no harm, in a perfectly competitive market, if one supplier declines to provide service to one particular customer, because that customer would have the choice of many other suppliers. Refusing to provide service at wholesale rates which exceed prevailing retail rates is inconsistent with competitive market conditions and competitive behavior. This refusal to offer service represents the foregoing of revenues that exceed competitive prices for the service. Refusing the higher revenues is consistent with competitive market conditions only if the wholesale customer would impose even

See Verizon Wireless, p. 11.
 See RTG/OPASTCO, p.10.

higher costs on the supplier than do retail customers. However, as I have already noted, the reverse is true – wholesale service is less costly to supply than retail service. Sprint Nextel's defense of its refusal to provide wholesale service can most accurately be interpreted as an effort to commingle retail and wholesale markets so as to make foreclosure seem innocuous.46

В. An ARR could not lead to higher roaming rates in a competitive market, nor could an ARR cause national carriers to withdraw single-rate calling plans in a competitive market. The national carriers have argued that an ARR could lead to an increase in the price of roaming.⁴⁷ For example, according to Dr. Rosston, "Firms currently have an incentive to bargain for low roaming prices to compete in the marketplace for customers on the basis of low roaming rates. But, if two parties have relatively balanced outbound and inbound roaming traffic, instead of negotiating a low price that would benefit consumers, they could negotiate a high price to ensure that their rivals would face a high price for their roaming."48 These two statements appear to point to opposite incentives. The latter statement suggests that the nationwide carriers may have no incentive to compete in roaming even now. If traffic between the large, national carriers tends to be balanced, then high wholesale roaming rates tend to harm the regional carriers and benefit the national carriers. Never-the-less, an ARR would not vitiate the value of such bargains, which merely sets a maximum price, and hence such bargains should persist.

Similarly, contrary to Cingular's claim that an ARR would eliminate the incentive for carriers to offer single-rate plans, ⁴⁹ given the claimed competitiveness of retail CMRS

 ⁴⁶ See Sprint Nextel, p. 20.
 47 See e.g., T-Mobile USA, Inc., p. 16.

⁴⁸ Rosston Comments, p. 34.

⁴⁹ See, Cingular, p. 24.

markets, a carrier that withdrew single-rate calling plans would lose customers to its rivals, since consumers value such plans. That is, given that its rivals offer such plans, a national carrier should not find it profitable to unilaterally stop offering single-rate calling plans. Competition protects the national market against any loss of single-rate calling plans.

Cingular has stated that an ARR could impose uncertain costs. This may possibly be true for the type of ARR for *outbound* traffic that Cingular discussed. However, I am only recommending that the ARR cap be required for inbound roaming; I am not advocating that any carrier be required to provide their own customers with the ability to roam on any or all other networks. Such an outbound roaming requirement is a very different economic proposition. A cap based on their own retail rates provides Cingular, and other CMRS operators, a certain and satisfactory margin for the capacity required to provide inbound roaming, that is, roaming from other carriers' customers. An ARR for inbound roaming only and with a simple, readily verifiable rate cap on what national carriers can charge is a minimally intrusive means to prevent the large carriers from using their market power to harm consumers.



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- Matters involving antitrust liability and damages, including monopolization claims, bundling and tying, vertical restrictions, and price fixing;
- Studies of horizontal and vertical mergers to determine whether they would lead to the exercise of market power;
- Auction design and bidder support. Markets examined include microwave and PCS spectrum, mineral rights, and electric power;
- Privatization of government supplied-goods and services; and
- Applications of game theory in business strategy.

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- Matters involving antitrust liability and damages, including monopolization claims, bundling and tying, vertical restrictions, and price fixing;
- Antitrust analyses including market definition and class certification;
- Studies of horizontal and vertical mergers to determine whether they would lead to the exercise of market power;
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SELECTED CASEWORK

UNITED STATES DISTRICT COURT, NORTHERN DISTRICT OF CALIFORNIA SAN FRANCISCO DIVISION

United States of America, et al. v. Oracle Corporation

Lead consultant to U.S. Department of Justice. Prepared expert report and rebuttal report, and provided deposition and court testimony analyzing the likely competitive effects of Oracle's proposed acquisition of PeopleSoft, 2003-2004.

UNITED STATES DISTRICT COURT, FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

D. Lamar Deloach, et al. v. Philip Morris Companies, Inc., et al.

Prepared expert report and provided deposition testimony evaluating claims that major cigarette companies and leaf buyers engaged in a price-fixing agreement, 2003-2004.

FEDERAL TRADE COMMISSION

In the Matter of Rambus Inc.

Lead consultant to Federal Trade Commission. Prepared expert report and rebuttal report, and provided deposition and court testimony analyzing the competitive effects of Rambus's actions, 2003.

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BOOK REVIEW

The Economics of Conformism, by Stephen Jones, reviewed for The Canadian Journal of Economics, February 1986.

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ACADEMIC EXPERIENCE

J. Stanley Johnson Professor, California Institute of Technology, 2004-

Visiting Professor of Business Strategy, University of Chicago GSB, 2000-2001

Murray S. Johnson Chair, University of Texas at Austin, 1997-2003

Chair, Department of Economics, University of Texas at Austin, 1997-1998

Rex G. Baker, Jr., Professor of Political Economy, University of Texas at Austin, 1990-1997

Visiting Professor of Economics, Massachusetts Institute of Technology, 1994-1995

Professor of Economics, University of Western Ontario, 1989-1990

Visiting Professor of Economics, California Institute of Technology, 1989-1990

Visiting Associate Professor of Economics, California Institute of Technology, 1988-1989

Associate Professor of Economics, University of Western Ontario, 1987-1989

Assistant Professor of Economics, University of Western Ontario, 1981-1987

Visiting Assistant Professor of Economics, Purdue University, 1980-1981



EDITORIAL DUTIES

Co-Editor, American Economic Review, 1993-

Organized AEA session in honor of William Vickrey, 1992

Associate Editor, American Economic Review, 1992-1993

Associate Editor, Journal of Economic Theory, 1992-1996

Member of AEA, Society for the Promotion of Economic Theory, and Associate of American Bar Association

OTHER PROFESSIONAL ACTIVITIES

Market Design Inc., Vice-President and Treasurer

Colin Clark Lecture, Australasian Econometric Society Meetings, 1998

John S. Day Distinguished Alumni Award, Purdue's Krannert School of Management, 1997

Fellow (1995) and Member of the Econometric Society

Member of American Economic Association, Society for the Promotion of Economic Theory, and Associate of American Bar Association



ATTACHMENT C

Letter from Mississippi Power

2992 West Beach Boulevard P.O. Box 4079 Gulfport, Mississippi 39502-4079

Tel 800.532.1502

December 14, 2005

SouthernLINC Wireless 600 University Park Place Suite 400 Birmingham, AL 35209

Attention: Greg Clyburn

Dear Greg:



Mississippi Power Company has always recognized the critical nature of our wireless communications system particularly as it relates to disaster recovery of our electric utility services. Never has that been more evident as it was during Hurricane Katrina. I can sincerely say that without the reliability of SouthernLINC's wireless communications system, the restoration after Katrina would have been severely hindered. This communications was a vital part of the effort providing our crews with the ability to communicate back to our Corporate Storm Center as well as enabling the efficient operations and effective coordination of the 12,000 crew members engaged in emergency repairs. However, our SouthernLINC wireless communications system is not only essential to the operations but, more importantly, is essential to the safety of our employees. The ability to communicate one-on-one directly through dispatch during emergency situations ensures that our employees can perform their jobs in a safe environment.

Mississippi Power Company is a member of the Southeastern Electric Exchange (SEE) and participates as an active member of the SEE Mutual Assistance Committee. We provide emergency restoration assistance to other SEE member companies during hurricanes, ice storms and other catastrophic events. While assisting other companies outside of our service territory we are unable to utilize our SouthernLINC Wireless 2-way communications. This severely hampers the restoration effort by creating a communications problem for our crews performing emergency repairs. We usually take an alternate means of communications (450 MHz 2-way radios) but this is often limited in effectiveness due to terrain and the availability of repeaters.

We currently have the ability to roam with Nextel on their cellular system which is helpful in communicating back to our Corporate Storm Center, but it is not a good solution where dispatch service is needed for our crews. Ultimately we need to be able to utilize our existing SouthernLINC wireless equipment through some kind of dispatch-roaming agreement with Nextel. This would greatly enhance our ability to provide a safe environment for our crews while working outside familiar territories and would enhance overall operations and coordination of these "off-system" events. In effect, we need both capabilities -- cellular and dispatch.

Tel 800.532.1502



A SOUTHERN COMPANY

Again, the importance of communications was brought home for us during what has been a devastating hurricane season. And the important role that dispatch-roaming plays in our efforts to provide safe, efficient restoration assistance to others cannot be overstated. If I can provide further detail or additional information regarding these needs, please do not hesitate to let me know.

Sincerely,

Bobby J. Kerley

Vice President Customer Services and Retail Marketing